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MEMORANDUM

BASIC PRESSURE MEASUREMENTS AT TRANSONIC SPEEDS ON A THIN 45° SWEPTBACK HIGHLY TAPERED WING WITH SYSTEMATIC SPANWISE TWIST VARIATIONS

WING WITH QUADRATIC SPANWISE TWIST VARIATION

By John P. Mugler, Jr.

Langley Research Center Langley Field, Va.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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SUMMARY

Pressure distributions obtained in the Langley 8-foot transonic pressure tunnel on a thin highly tapered twisted 45° sweptback wing-body combination are presented. The wing has a quadratic spanwise twist variation from 0° at 10 percent of the semispan to 6° at the tip. The tip is at a lower angle of attack than the root. Tests were made at stagnation pressures of both 0.5 and 1.0 atmosphere at Mach numbers from 0.800 to 1.200 through an angle-of-attack range from -4° to 20°.

INTRODUCTION

A research program is currently being conducted at the Langley Research Center to determine the loads due to wing twist at transonic and supersonic speeds. As part of this program, tests have been made in the Langley 8-foot transonic pressure tunnel on four wings; an untwisted wing to serve as a reference, and wings with linear, quadratic, and cubic variations of twist across the span. References 1 and 2 present the basic pressure measurements on the untwisted and linearly twisted wings, respectively. The present paper presents the basic pressure measurements on the wing with a quadratic variation of twist across the span. These data are being presented without analysis.

SYMBOLS

- b wing span
- b'/2 unsupported semispan (distance from outer face of wing mounting block to tip)

c airfoil section chord, measured parallel to plane of symmetry

ē wing mean aerodynamic chord

cm wing section pitching-moment coefficient about 0.25c,

$$\int_{0}^{1} \left(C_{p,L} - C_{p,U} \right) \left(0.25 - \frac{x}{c} \right) d\left(\frac{x}{c} \right)$$

 c_n wing section normal-force coefficient, $\int_0^1 (c_{p,L} - c_{p,U}) d(\frac{x}{c})$

C_p pressure coefficient

Cp, sonic pressure coefficient corresponding to local Mach number of 1.0

D diameter

l body length

M Mach number

q free-stream dynamic pressure

R Reynolds number based on c

x distance measured from leading edge of wing or from nose of body, positive rearward

y spanwise distance measured from body center line

y' spanwise distance measured from outer face of wing mounting block

wing-twist influence coefficient due to normal load at c/4 point

 $\frac{\partial \Delta \alpha}{\partial m}$ wing-twist influence coefficient due to moment about c/4 point

α angle of attack of wing-body center line

 $\Delta\alpha$ angle of attack of wing station minus angle of attack of wingbody center line

ø built-in twist angle

Subscripts:

L lower surface

U upper surface

APPARATUS

Tunnel

The investigation was conducted in the Langley 8-foot transonic pressure tunnel. The test section of this facility is rectangular in cross section. The upper and lower walls are slotted longitudinally to allow continuous operation through the transonic speed range with negligible effects of choking and blockage. During this investigation, the tunnel was operated at stagnation pressures of approximately 0.5 and 1.0 atmosphere. The dewpoint of the tunnel air was controlled and kept constant at approximately 0°F. The stagnation temperature of the tunnel air was automatically controlled and was kept constant and uniform across the tunnel at 123°F. Control of both dewpoint and stagnation temperature in this manner minimized humidity effects. Details of the test section have been presented in reference 3.

Models

The wing tested has the same plan form, thickness, and camber distribution as the untwisted wing described in reference 1. However, the wing of the present investigation had twist built into each wing panel from 10 percent of the semispan to the tip. The sections were twisted about their leading edge in planes parallel to the model plane of symmetry with the trailing edges up. Therefore, the tips are at a lower angle of attack than the wing-body center line. The twist varied quadratically from 0° at the 10-percent-semispan station to 6° at the tip. The wing was constructed of steel and was tested as a midwing configuration. The wing was tested in combination with the basic body of reference 1. Details of the wing-body combination are presented in figure 1 and the wing twist characteristics are presented in table I.

TESTS

The wing-body combination was tested at Mach numbers from 0.800 to 1.200 at tunnel stagnation pressures of 0.5 and 1.0 atmosphere. At the stagnation pressure of 0.5 atmosphere, the angle-of-attack range extended from -4° to 20°. At the stagnation pressure of 1.0 atmosphere, the angle-of-attack range extended from -4° to 20° only at the Mach numbers of 0.800, 0.900, and 0.940. For the remainder of the test Mach numbers at this stagnation pressure, the angle-of-attack range extended from -4° to 12°.

Transition strips were fixed on the model during all the tests. The strips were about 0.10 inch wide and were formed by sprinkling No. 120 carborundum grains on a plastic adhesive. The strips extended from the wing-body juncture to the wing tip at 10 percent of the local chord on the upper and lower wing surfaces and formed a ring around the body at 10 percent of the body length.

The Reynolds number based on the wing mean aerodynamic chord varied over the Mach number range from about 1.3×10^6 to 1.5×10^6 during tests at 0.5 atmosphere and from about 2.6×10^6 to 2.9×10^6 during tests at 1.0 atmosphere. (See fig. 2.)

MEASUREMENTS AND ACCURACY

Measurements of the local static pressures on the model were made using flush-mounted orifices distributed over the upper and lower wing surfaces and along longitudinal body rows. Figure 3 shows the location of the six stations on the wing and the five rows on the body where the orifices were located. Pressure coefficients determined from these measurements are estimated to be accurate within ±0.006.

The angle of attack of the model was measured with a strain-gage attitude transmitter mounted in the nose of the model and is estimated to be accurate within $\pm 0.1^{\circ}$. Calibrations of the test section of the Langley 8-foot transonic pressure tunnel indicate that local deviations from the average free-stream Mach number are of the order of ± 0.005 at subsonic speeds. With increases in Mach number, these deviations increased but did not exceed ± 0.010 in the region of the wing at M = 1.2. Several representative Mach number distributions at the center of the test section have been presented in reference 3. The average stream Mach number was held to within ± 0.003 of the nominal values shown in the figures.

The stagnation pressures of 1,058 and 2,116 pounds per square foot have been designated 0.5 and 1.0 atmosphere, respectively, throughout this paper. The stagnation pressure was generally held to within ±10 pounds per square foot during tests at 0.5 atmosphere and to within ±20 pounds per square foot during tests at 1.0 atmosphere.

Influence coefficients were obtained for this wing from a static calibration and are presented in table II. Wing-twist angles, computed by using the experimental wing section data in conjunction with the influence coefficients of table II, are estimated to be accurate to within one-quarter of a degree.

RESULTS

The pressure coefficients for the wing in the presence of the body are presented in tables III and IV for stagnation pressures of 0.5 and 1.0 atmosphere, respectively. Pressure coefficients for the body in the presence of the wing are presented in tables V and VI for stagnation pressures of 0.5 and 1.0 atmosphere, respectively. The values of the free-stream dynamic pressure shown in the tables is the average value over the angle-of-attack range. The pressure coefficients have been plotted to show the pressure-coefficient distributions over the surfaces and are presented in figure 4 for the wing in the presence of the body and in figure 5 for the body in the presence of the wing. The distributions over the wing (fig. 4) have been numerically integrated for section normal-force and section pitching-moment coefficients about 0.25c and the results are presented in table VII. The section data were used in conjunction with the influence coefficients of table II to calculate the change in angle at several wing stations and these values are also presented in table VII.

In figures 4 and 5, data have been presented for both stagnation pressures in the same figure. Fixing transition during the tests tended to minimize the effects of Reynolds number on the pressure coefficients. This fact is evident from figures 4 and 5, which show that in all cases changing the stagnation pressure from 0.5 to 1.0 atmosphere had no significant effects on the pressure coefficients over the body or over the inboard wing stations. Aeroelastic effects caused the wing to twist over the outboard regions. The results in table VII show that the outboard wing sections are generally operating at a lesser angle of attack at a stagnation pressure of 1.0 atmosphere than at 0.5 atmosphere due to the differences in dynamic pressure. Therefore, the differences in the pressure distributions over the outboard wing sections at the two

different stagnation pressures in figure 4 should be attributed to the differences in local angle of attack and not to Reynolds number effects.

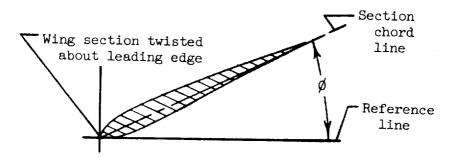
Langley Research Center,
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- 1. Mugler, John P., Jr.: Basic Pressure Measurements at Transonic Speeds on a Thin 45° Sweptback Highly Tapered Wing With Systematic Spanwise Twist Variations Untwisted Wing. NASA MEMO 10-20-58L, 1958.
- 2. Mugler, John P., Jr.: Basic Pressure Measurements at Transonic Speeds on a Thin 45° Sweptback Highly Taperel Wing With Systematic Spanwise Twist Variations Wing With Linear Spanwise Twist Variation.

 NASA MEMO 12-28-58L, 1959.
- 3. Mugler, John P., Jr.: Transonic Wind-Tunnel Investigation of the Aerodynamic Loading Characteristics of a 60° Delta Wing in the Presence of a Body With and Without Indentation. NACA RM L55Gll, 1955.

TABLE I.- WING TWIST CHARACTERISTICS



Typical Section

<u>у</u> b/2	Ø, deg
0	0
.10	0
.12	.003
.25	.167
.40	.667
.60	1.852
.80	3.630
.95	5.352
1.00	6.000

TABLE II.- WING DEFLECTION CHARACTERISTICS

Twist measurement station, $\frac{y}{b/2}$	$\frac{y'}{b'/2} = 0$	f change in twi quarter che $\frac{y'}{b'/2} = 0.348$	hange in twist angle due to a load a quarter chord, $\frac{\partial \Delta a}{\partial n}$, $\deg/1b$, at - $\frac{1}{2} = 0.548$ $\frac{y'}{b'/2} = 0.565$ $\frac{y'}{b'/2} = 0.0000$	795	ection $\frac{y'}{b'/2} = 0.948$ 0006
04.	0	20005	7,00TG	0108	0175
9.	0	1,000	*100.1	9110	0481
8.	0	1000	0700.	0108	0490
8.	0	7000	0000:	2010	

	φ	
moment at -	$\frac{\mathbf{y'}}{\mathbf{b'}/2} = 0.948$	0.0005 .0008 .0021 .0122 .0970
Rate of change in twist angle due to a pitching moment about section quarter chord, $\frac{\partial \Delta \alpha}{\partial m}$, deg/in-lb, at -	$\frac{y'}{b'/2} = 0.795$	0.0001 .0004 .0027 .0155
ist angle due to a er chord, $\frac{\partial \Delta \alpha}{\partial m}$, d	$\frac{y'}{b'/2} = 0.565$	0.0001 .0002 .0024 .0057
f change in twist angle section quarter chord,	$\frac{y'}{b'/2} = 0.348$	0.0001 .0005 .0006 .0007
Rate of about	$\frac{\mathbf{y'}}{\mathbf{b'}/2} = 0.185$	0.0001 .0002 .0002 .0002
Twist	station, $\frac{y}{b/2}$	53.0 54.0 86. 87.

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE

OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY

(a) 12-percent-semispan station

	<u> </u>										
	x/c	a = -4	$\alpha = -2^{\circ}$	α = 0 ⁰	$a = 5_0$	a = 40	α = 80	α = 12	e ^o a = 16	o a = 20	o x/c
Г	+			,	M = 0.80	0; q = 31	O lb/sq	ft			
	●000 ●032 ●078	• 316	208		015	157	472	810	-1.55		
9	• 150 • 250	•099 •018		060	137	227	404	593	77		
Surface	• 350 • 450	001 048	070	-•127 -•132	191 188	256	444				•250
		084	111 140	-•173 -•196	-•220 -•246		433 443		-4613	701	•450
Upper		-•057 -•050	-•108 -•093	-•155 -•129	195 157	248	-•338 -•254	387	554	605	•650
	•840 •926	-•052 -•029	083 050	110 066	127 077	153	189	347 271	424		•760 •840
	l			066	-•0//	-•090	109	169	317	516	•926
	●035 ●082	373	-•262	-•109	•022	•146	• 355	•535	•695	.813	•035
ace	• 150 • 250	236	~•154	-•075	-•000	•078	•219	• 354	•434	•574	●082 ●150
Surface	• 350 • 450	-•222 -•240	-•159 -•183	091 119	033 062	-029 -006	•144	• 249	• 357	• 428	•250 •350
Lower	•550 •650	-•228 -•205	-•177 -•161	121 110	068	018	•099 •075	•197 •162	●287 ●245	• 364 • 315	• 450 • 550
J.	●750 ●850	138 090	108	070	064 031	019 .004	●061 ●074	•135 •130	•201 •179	•259 •220	•650 •750
	900	~.065	069 050	-•038 -•029	010 005	•020 •020	•075 •060	•105 •077	•135 •095	•156	850
									•095	•101	•900
		Г		М =	0.900;	q = 358 :	lb/sq ft				
	●000 ●032	•318 •326	•467 •221	• 548 • 122	•560 •013	•544 -•109	•406	• 164	073	299	•000
	●078 ●150	•210	• 123	•038	041	122	-•390 -•281	-•733 -•471	-1.297 771	-1.286 -1.231	●032 ●078
surface	• 250	•104	060	049	130 203	-•209 -•279	354	496	631	908	•150
H	• 350	-•008	078	143	206	266	-•392 -•397	-•525 -•521	632	709	• 250
	•450	-•065	133	197	258	316	435	552	615 470	668 683	•350
Upper	●550 ●650	115 086	180	259	~- 335	-•392	500	608	539	692	•450 •550
	760	073	-•140 -•121	- 203	289	-•381	487	~-582	568	619	•650
~	. 840	077	110	169	221	-+345	497	513	587	601	.760
- 1	926	050	069	- 088	174	-•211	508	-+426	620	631	.840
			****	• • • • • • • • • • • • • • • • • • • •	-•101	100	217	240	512	577	•926
	•035 •082	-•348	-•235	094	.034	•146	•359	•550	•712	.839	.035
Surface	• 150 • 250	-•226	-•156	-•072	004	•074	•231	•373	•501	•603	•082 •150
3	• 350			107	047	.015	-146	• 265	ایسوا		•250
	♦ 450			149	089	025	099	205	• 375 • 306	• 465	• 350
Lower	• 550				108	045	.068	166	259	• 395	• 450 • 550
8	• 650				098	048	053	134	216	• 346 • 296	•550
-	● 750 950				053	013	068	127	194		•650
j	850				025	•007	•065	105	145	• 262 • 206	•750
	• 900	-•081	-•066	-•043	016	008	051	•075	104	•153	•850 •900

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(a) 12-percent-semispan station - Continued

							10	r = 80	r = 12 ⁰	$x = 16^{\circ}$	$a = 20^{\circ}$	x/c
1000		x/c	$\alpha = -14^{\circ}$	r = -20 c						- 10		
000	Г				M =	= 0.940;	q = 368 :	b/sq ft			T	
136	+	.000	.373	.492	•569	.581	•569		•229	010		000 032
100	ł			•239	• 136						-1.357	078
150	1	1		•139							1	150
250			•110			-						250
1.550	1		•016	-						581	557	• 350
***	1	• 350	010	- 1						601		450
1.550		• 450				1			573	629		• 550
1.650	1	•550							562			•650
*** *** *** *** *** *** *** *** *** **	. [•650										•760
*** 840	3								548			.840
0.926		• 840							436	526	625	• 926
1000		•926	057	074	084	-0.101				,		
***	-			.		024	149	▲358	•555	•722	.857	•035
150			310	220	073	•036	•14/	• > > -		ļ		.082
150 1250 1	1	-		. ,,,	- 068	005	.076	•227	• 375	•513	•625	•150 •250
100	. 1		207	145	-,000	•000					407	•350
M = 0.980; q = 385 10/4 167 239 186 187 187 186 187 187 187 187 187 186 187	í		ا مرم ا	186	106	057	•013	•138		l .		450
M = 0.980; q = 385 10/4 167 239 186 187 187 186 187 187 187 187 187 186 187	1						034	-			1 1	•550
M = 0.980; q = 385 10/4 167 239 186 187 187 186 187 187 187 187 187 186 187	3					135						•650
1750	١.					127				1		750
M = 0.980; q = 385 lb/sq f; M = 0.995; q = 358; q = 0.995; q = 0	ŞΙ											850
M = 0.980; q = 385 lb/sq f; M = 0.995; q = 358; q = 0.995; q = 0	9				067			_			1 1	900
000				-•082	044	025	008	•022	1 .070	***		
000			<u> </u>		M	= 0.980;				1	1 227	•000
032		222	1 426	4536	.595	.609	€594	•497				032
078				1		.068				1	1	.078
150												.150
250				-	010					1 -		•250
10	e)			037	109		1			1		• 350
10	fã			~.055				•		1		• 450
10	7		061	117			I			1		•550
0.650		•	147	202			I -				689	•650
• 926	ėr	•650	119		1				1		493	•760
• 926	ď	• 760					1	-	575	658		●840
035	₽								559	602	596	•926
035					043	-070	.176	•384	. •576	.740	.885	.035
**150				1	1					.535	653	.150
350221162092038033 -101 .229 .344 .450 .50246187128083033079 .064 .189 .304 .404 .550296296297193141 .049 .040 .159 .262 .356 .550324279222175104 .040 .159 .262 .356 .750312262208151070 .053 .151 .243 .326 .750 .750312268195136053 .041 .124 .205 .279 .279 .228 .326 .326 .326 .326 .326 .326 .326 .326		• 150	165	-•106	043					1		• 25 C
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900 -0315 -0257 -0205 -0149 -0067 0015 0091 0104	J.	1 0000	30	7 245	· 1		·		_ 1			•90

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(a) 12-percent-semispan station - Continued

	/-	T				·	Υ			,	,
	x/c	$\alpha = -4^{\circ}$	$\alpha = -5_0$	$\alpha = 0_0$	$\alpha = 5_0$	a = 40	a, = 80	$\alpha = 12^{\circ}$	a = 160	$\alpha = 20^{\circ}$	x/c
_				P	4 = 1.030	q = 400	O lb/sq f	`t			
	•000 •032 •078	• 495 • 402 • 295	•588 •307 •214	•638 •213 •138	•647 •117 •073	•642 •017 •008	•561 -•203 -•117	•372 -•507 -•281	•176 -1•006 -•507	031 -1.111	.000 .032 .078
surface	•150 •250 •350	•183 •086 •064	•112 •016 •007	•043 -•052 -•065	022 100 118	085 149 165	176 235 247	295 333 346	-• 387 -• 421 -• 433	-1.011 476 511 527	•150 •250 •350
Upper s	• 450 • 550 • 650 • 760	001 085 069 074	053 133 124	-•117 -•185 -•185	-•161 -•226 -•230	207 268 276	-6279 -6339 -6347	-•377 -•430 -•433	458 510 521	551 602 607	•450 •550 •650
	• 840 • 926	120 118	130 178 170	-•197 -•242 -•232	-•242 -•290 -•274	-•286 -•333 -•317	-•364 -•414 -•401	449 495 484	-•534 -•575 -•568	604 651 632	•760 •840 •926
	•035 •082	-•188	-• 106	•009	•115	•218	•431	•625	• 788	• 92 2	•035 •082
surface	• 150 • 250 • 350	095	047 111	•011 -•047	•070 •004	•139 •075	•301 •207	• 45 2	•589 •463	•697	•150 •250
	• 450 • 550 • 650	-•169 -•220 -•247	135 180 216	074 130 161	025 086 119	.024 026 055	•154 •116 •087	•281 •243	•401 •358	•566 •501 •462	•350 •450 •550
Lower	•750 •850 •900	235 234 241	-•203 -•189 -•197	153 139 150	103 086 098	028 021 034	•103 •091	•210 •207 •181	•321 •305 •261	•412 •386 •342	•650 •750 •850
						q = 421	071	•149	•225	•295	•900
	•000	•529	•582	•623	•628	•614	•581	• 495	• 451	120	200
	●032 ●078 ●150	•355 •270 •176	•259 •193 •111	•178 •135	•075 •060	025 007	-•249 -•156	-•471 -•282	858 461	•139 -•920 -•843	.000 .032 .078
surface	• 250 • 350 • 450	.081 .071 .018	.024 .009 033	-016 -038	034 076 084	080 126 141	-•174 -•206 -•227	258 279 287	-•321 -•337 -•351	362 378 402	•150 •250 •350
Upper s	•550 •650 •760	045 036 053	097 089 105	077 131 133 147	123 177 184	171 223 230	243 291 301	310 364 356	-• 372 -• 416 -• 425	423 466 470	•450 •550 •650
נו	•840 •926	-•103 -•081	-•157 -•138	-•193 -•174	-•197 -•244 -•224	-•242 -•284 -•268	-•307 -•349 -•337	-•370 -•405 -•399	431 470 463	463 502 494	•760 •840 •926
	•035 •082	-•209	-•117	008	•068	•170	•356	• 574	.818	• 985	•035 •082
surface	•150 •250 •350	-•091 -•127	-•040 -•085	•022 ••019	.072	•134 •068	•272 •208	•441	•614	•753	•150 •250 •350
	• 450 • 550 • 650	144 185 209	-•101 -•151	036 087 116	000 050 079	•059 •001 •031	•162 •117 •095	• 294 • 258 • 233	• 446 • 413 • 382	•631 •575 •537	•450 •550
Lower	• 750 • 850 • 900	-•201 -•183 -•189	-•165 -•146	-•102 -•086	-•065 -•050	016 .003	•122 •125 •108	•245 •234 •209	• 382 • 374 • 343 • 314	• 498 • 475 • 438	•750 •850
							•103	•205	• 314	• 395	•900

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(a) 12-percent-semispan station - Concluded

[x/c	a = 40	a = -2°	a = 00	a = 2°	α = 4°	ar = 80	a. = 12 ⁰	a = 160	$\alpha = 20^{\circ}$	x/c
				м	= 1.200	; q = 436	lb/sq f	t		,	
Upper surface	.000 .032 .078 .150 .250 .350 .450 .550 .650 .760 .840	•557 •344 •268 •165 •117 •096 •055 -•001 -•001 -•025 -•084 -•068	.605 .256 .200 .098 .061 .044 .004/ 051 055 069 128	.636 .164 .133 .040 003 006 040 113 167 158	.641 .079 .061 .000 064 045 077 135 144 148 205 188	.634 023 .011 060 098 100 123 175 184 236 228	.602 219 148 138 178 199 242 250 254 302 299	.509 424 273 237 248 251 270 308 317 325 364 357	.429 701 380 298 307 332 367 373 376 416	.496 753 738 379 339 380 421 435 443 476	.000 .032 .078 .150 .250 .350 .450 .550 .650 .760 .840
Lower surface	• 035 • 082 • 150 • 250 • 350 • 450 • 650 • 750 • 850 • 900	187 064 093 107 149 175 167 145	132 125 114	016 070 090 085 083	-032 -023 -044 -037 -038	.095 .082 .028 .013 .010	•348 •259 •221 •192 •145 •110 •111 •113 •099	• 302 • 256 • 223 • 236 • 245	●347	•732 •605 •550 •516 •478 •467	.035 .082 .150 .250 .350 .450 .550 .650 .750 .850 .900

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(b) 25-percent-semispan station

	<u> </u>		-0	1 .	1		T	,			,
	x/c	a = -4°	$\alpha = -2^{\circ}$	$\alpha = 0^{\circ}$	$\alpha = 5_0$	a = 40	$\alpha = 80$	a = 12°	α = 16°	$\sigma = 50c$	x/c
_	ļ		·	М	= 0.800;	q = 310	lb/sq f	t			
	•000 •025 •076	380 .313 .160	009 .212 .070	•323 •075 ••050	•417 -•102 -•174	•364 -•349 -•333	163 -1.053 630	674 -1.359 -1.118	-1.041 -1.264 -1.259	-1.169 -1.092 -1.111	•000 •025 •076
surface	•150 •250 •350	•002 -•050	075 120	164 197	244 262	335 346	546 528	900 689	-1.183 -1.064	-1.029 987	•150 •250 •350
Upper su	4450 4550 650	074 070 065	138 121 111	198 174 151	261 220 188	-•326 -•278 -•234	477 384 303	503 449 410	939 785 663	916 845 783	•450 •550 •650
ďn	• 750 • 850 • 926	047 018 -011	078 043 002	118 064 007	132 075 011	167 091 022	209 119 035	321 220 117	580 477 373	747 704 650	•750 •850 •926
	•023	658	~•512	-•219	004	•170	•385	•490	• 558	•595	•023
ace	•072 •150 •250	516 431 302	296 232 200	124 096 109	016 011 035	•102 •073 •036	•277 •219 •164	•402 •337 •268	•510 •442 •369	•579 •520	•072 •150 •250
surface	• 350 • 450 • 550	-•252 -•225 -•191	-•182 -•174 -•146	109 111 096	043 059 047	•018 •003 •002	•133 •099 •087	•231 •185 •160	•316 •264 •225	•386 •324 •279	•350 •450 •550
Lower	•650 •750 •860	-•143 -•085 -•029	110 063 019	070 031 001	030 .003 .023	•012 •033 •052	•087 •092 •085	•139 •129 •101	•185 •153 •090	+230 +183 +093	•650 •750 •860
	◆900	-•006	•003	•015	.036	•052	•079	•079	• 045	•025	•900
		т				q = 358	lb/sq ft				
	•000 •025	-•250 •306	•072 •207	• 331 • 083	•417 -•079	•394 -•291	•057 ~ •939	-•384 -1•208	754 -1.203	842 932	•000 •025
ace.	•076 •150 •250	•159 -•013	-092	-•052 -•180	-•171 -•260	-•313 -•344	~•549 ~•521	-1•003 -•711	-1.183 -1.010	-•958 -•969	•076 •150 •250
surface	• 350 • 450 • 550	-•069 -•102 -•094	149 170 160	-•231 -•256 -•224	317 372 301	-•376 -•442 -•417	536 577 558	~•681 ~•661 ~•622	938 874 796	942 893 843	•350 •450
Upper	●650 ●750 ●850	-•091 -•065 -•035	143 107 060	200 144 082	263 184 098	417 216 092	570 524 189	590 521 361	715 666	794 755	•550 •650 •750
	• 926	• 005	010	016	020	012	055	~•218	-•608 -•522	-•726 -•681	•850 •926
	•023 •072 •150	673 512 404	250	-•243 -•141 -•117	024 030 029	•147 •083 •056	•375 •271 •218	•503 •412 •348	•583 •522 •455	•638 •605 •547	•023 •072 •150
surface	• 250 • 350 • 450	360 328 338	-•230 -•239	-•136 -•143 -•154	058 071 086	•016 -•004 -•025	•157 •125 •091	•277 •233 •187	•387 •333 •282	•473 •420 •361	• 250 • 350 • 450
Lower s	•550 •650 •750		-•152 -•084	097 050	076 049 013	-•021 -•008 •020	•077 •077 •083	•159 •136 •124	• 241 • 206 • 171	•316 •269 •224	•550 •650 •750
	•860 •900	-•040 -•008	-•028 -•004	008	•018 •033	•039 •048	•076 •065	•087 •055	•110 •054	•145 •082	•860 •900
	——— <u>—</u> —										1

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(b) 25-percent-semispan station - Continued

						г		100	200	= 200	x/c
Γ	x/c	α = _4°	α = - 2°	$\alpha = 0^{\circ}$	$\alpha = 2^{\circ}$	$\alpha = 4^{\circ}$	$\alpha = 80$. = 12 ⁰ α	= 16° a	= 20	
				M =	0.940;	a = 368 1	b/sq ft				
╀		184	.095	• 341	.426	•411	•133				0 0 0 025
ļ	.000 .025	304	211	.090	058	258	782				076
	076	158	•070	041	151	-•289	508	873 -	10172		150
١	150	****					494	642 -	1.190 -	1.069	250
	250	016	088	175	242	339 363	499		952 -	T	• 350
	.350	080	155	235	292 364	418	550		784	• / 5 5	450
	• 450	114	200	307	343	407	536	630			•550
	• 550	112	182	276 282	368	432	552			•	•650 750
I L	• 650	109 083	172 122	180	331	404	522	-•571			•750 •850
;	• 750	045	065	079	153	349	488	503	• • • •		•926
-	●850 ●926	•004	004	008	000	075	-•200	288	528	-1007	• ,20
1					1			1		455	.023
١	. 022	624	512	243	040	•138	•370	•509	•597 •531	•655 •628	072
١	•023 •072	460	302	136	044	•073	•261	• 409 • 346	• 465	571	.150
ı	150	366	259	119	040	•050	•211	277	394	495	.250
<u>, </u>	250	342	247	146	077	•006	113	232	344	.442	• 350
ē	. 350	321	241	160	092	015 042	•074	182	290	• 385	• 450
Suriace	· 450	331	274	196	119	039	059	.159	253	• 338	• 550
- 1	♦ 550	333	287	183	076	023	052	•134	•218	• 295	•650
61	650	332	280	057	026	004	.061	•120	•190	•255	•750 •860
Lower	• 750	295	133 028	006	.011	025	.042	•080	•131	•180	900
_	•860 •900	017	l	.015		•033	•021	•048	•075	•122	.,00
			1	<u> </u>	4 = 0.980		T		534	801	•000
	•000	111	. 159	.363			•209	194 -1.019		-1.206	.025
	025	•319	• 225	•114				827		-1.182	.076
	.076	•173	•082	018	120			102.	1	_	• 150
4)	• 150			146	232	306	447	576		-1.215	• 250
surface	•250	004		1		1		580	-	-1.209	• 350
끞	• 350	076				I	504		759	-1.130	• 450 • 550
71.5	• 450	130		i _	1				582	796 435	.650
H	•550	150			1355				625 571	474	.750
Upper	750	14		028				1	-4475	665	• 85 0
Ð	850	14	8 225		1		1		417	657	.926
	• 926	12	9 -•195	24	1282	334					
		1	_		2020	.149	38	•532	.620	.681	.023
l	•023	58 42		2 22 7 11			287	• 435	•553	654 599	•072 •150
l	•072	1				3 •058			•488 •417	526	250
٥				- 1	306	- 1		1	371	477	.350
ت ا	350	30	422	113		1			314	419	.450
Ç.	450	1	7 25					1	283	.376	•550
7 69			426			- 1	~ 1			• 336	.650
Surface	.550			5 I 7 I	2 I - 4 1 0	7 -9 71	9 1 3 1	·		•300	.750
ı	1 7551	33		- 1		R = 04	5 •05	•142			
1970	•650 •750	33	925	5 19	813		- 1	097	•167	•227	.860
Louer surfa	•650 •750	33 30 29	925	5 -•19 6 -•18	813 912	403	8 03	097	•167		.900

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(b) 25-percent-semispan station - Continued

	x/c	a = -40	a = -5 ₀	a = 0°	$\alpha = 2^{\circ}$	a = 40	a = 80	a = 12°	1	Ι.	
	<u> </u>	<u>. L</u>			·	<u> </u>		d = 12	α = 16°	$\alpha = 50_{\rm C}$	x/c
		Τ	ī		T	q = 400	lb/sq ft	Т	····	,	- <u>-</u>
41	•000 •025 •076 •150	-•014 •365 •220	•220 •273 •135	• 404 • 166 • 037	•482 •037 -•059	•481 -•135 -•177	•290 ••583 ••394	093 -1-013 890	-•436 -1•047 -•991	682 -1.081 -1.078	•000 •025 •076
surface	● 250 ● 350 ● 450	•054 -•018 -•085	017 072 147	101 149 212	-•171 -•207 -•268	-•241 -•267 -•319	359 367 413	476 485 516	-•968 -•927 -•750	-1.079 -1.079 -1.049	•150 •250 •350 •450
Upper	•550 •650 •750	079 113 105	138 170 153	-•210 -•239 -•226	-•259 -•294 -•270	312 338 317	412 426 404	-•517 -•529 -•511	-•520 -•560 -•558	778 669 627	•550 •650 •750
	◆850 ◆926	-•111 -•111	-•156 -•148	-•224 -•213	-•277 -•256	-•318 -•293	~•408 ~•340	-•512 -•465	-•565 -•509	-•574 -•354	•850 •926
	•023 •072 •150	479 322 235	394 190 152	-•168 -•066 -•061	.025 .017 .022	•189 •127 •107	•428 •327 •276	•577 •482 •421	•666 •606 •540	•732 •701	•023 •072
surface	• 250 • 350 • 450	235 226 238	-•160 -•169 -•191	074 093 127	015 029 073	.060 .033 ~.014	•212 •172 •129	• 352 • 305 • 258	•470 •424 •375	•646 •575 •527 •472	•150 •250 •350 •450
Lower s	•550 •650 •750	242 248 232	-•203 -•213 -•192	145 157 141	096 107 088	030 040 020	•107 •099 •106	•231 •208 •197	• 340 • 309 • 281	•433 •395 •358	•550 •650 •750
	• 860 • 900	-•217 -•215	-•184 -•177	-•138 -•131	-•085 -•075	011 011	•085 •063	•157 •117	•233 •186	•291 •240	•860 •900
				М :	= 1.125;	q = 421	lb/sq ft		l		
	•000 •025	•071 •369	• 277 • 284	• 440 • 197	•498 •052	•501 -•094	•362 ••519	•069	268	506	•000
Ge	•076 •150 •250	• 231	• 152 -• 004	•070	030	-•136	-•411	-•792 -•743	877 861	900 892	•025 •076 •150
surface	• 350 • 450 • 550	•013 -•049 -•050	051 109 113	063 105 158 159	-•133 -•161 -•215	202 221 267	302 314 351	378 384 421	-•696 -•629 -•633	884 869 871	• 250 • 350 • 450
Upper	•650 •750 •850	-•075 -•064 -•073	132 116 123	176 161 167	215 232 209 216	271 283 263 264	348 371 347	428 439 420	576 542 513	666 540 496	•550 •650 •750
	926	078	129	163	213	-•257	346 304	-•412 -•389	-•484 -•417	413 198	•850 •926
۵	•023 •072 •150	-•462 -•274 -•176	-•372 -•156 -•104	137 047 015	.020 .029 .044	•187 •132 •113	•407 •312 •266	•571 •479 •420	• 704 • 641 • 579	• 795 • 764 • 713	•023 •072 •150
surrace	• 250 • 350 • 450 • 550	-•185 -•175 -•186 -•199	116 116 140	027 053 076	-0032 -0038	.086 .061 .021	•220 •190 •147	• 362 • 325 • 283	•516 •473 •436	•646 •601 •552	•250 •350 •450
LOWer	•650 •750 •860	199 204 193 176		093 103 091 085	-•052 -•064 -•049 -•050	-008 -006 -005	•124 •115 •129 •125	•260 •247 •250 •221	• 404 • 384 • 363	•519 •484 •457	•550 •650 •750
	•900	185		093	054	•000	116	•195	• 324 • 282	•393 •347	•860 •900

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(b) 25-percent-semispan station - Concluded

	x/c	a = -40	a. = -2°	$\alpha = 0_0$	α = 2 ⁰	$\alpha = 4^{\circ}$	or = 80	a = 120	a = 160	$\alpha = 20^{\circ}$	x/c		
				М	= 1.200;	q = 436	q = 436 lb/sq ft						
Upper surface	.000 .025 .076 .150 .250 .350 .450 .550 .650 .750 .850	•182 •374 •242 •081 •037 -•021 -•029 -•061 -•045 -•054	.344 .296 .164 .018 017 075 084 109 092 102	.466 .199 .077 044 072 133 144 159 144	.532 .080 005 108 120 178 192 198 179 185	.529 049 101 157 232 242 241 223 223	.423 439 353 258 281 310 309 326 307 290	-180 670 615 335 347 380 400 377 377 356		362 753 723 748 778 687 535 469 474 467	.000 .025 .076 .150 .250 .350 .450 .550 .650 .750 .850		
Lower surface	1	454 244 154 154 166 183 183 158 140	134 134 123 100	091 087 059	.060 .043 .050 .037 .016 015 033 041 035 012	•028	.400 .315 .269 .224 .198 .162 .140 .118 .123 .124 .128	.563 .469 .418 .360 .325 .279 .249 .235 .260 .254	.679 .605 .547 .485 .446 .407 .381 .369 .364 .340	•782 •737 •687 •621 •577 •535 •503 •476 •458 •410 •374	.023 .072 .150 .250 .350 .450 .550 .650 .750 .860		

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(c) 40-percent-semispan station

	x/c	a = 1,0	a = -2°	$\alpha = 0^{\circ}$	a = 2°	a = 40	a = 8°	100		. 	T
				L	<u> </u>	<u> </u>	<u> </u>		$\alpha = 16^{\circ}$	$\alpha = 50_{\rm o}$	x/c
	-			I-1	= 0.800;	d = 210	lb/sq f	t	·		
Upper surface	.000 .020 .073 .150 .250 .350 .440 .550	.206 .360 .185 .098 .030 019 041 049	•257 •276 •077 •008 -•048 -•088 -•107 -•102 -•094	• 333 • 128 • • 054 • • 105 • • 142 • • 168 • • 173 • • 156 • • 138	.267 093 212 212 233 245 237 207 172	419 458 430 370 349 320 271 222	-1.188	-1.280 -1.209	934 940 971 979 922 875 845 811	872 864 857 833 813 794 772 757	.000 .020 .073 .150 .250 .350 .440 .550
Ū	• 750 • 850 • 923	-•039 -•012 •030	-•075 -•039 •009	-•103 -•058 •002	-•127 -•071 -•002	160 092 014	192 112 033	586 453 304	-•731 -•689 -•636	723 707 681	•750 •850 •923
Lower surface	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850	745 683 723 629 267 140 099 069 020 .024 .036	619430351251189154108068022018033	361 153 138 124 107 091 060 028 -009 -034 -042	038 025 038 043 040 029 012 012 041 061 064	•187 •108 •065 •037 •029 •035 •046 •068 •080 •082	•385 •284 •211 •162 •138 •119 •110 •116 •112 •103	•471 •396 •317 •259 •186 •162 •144 •129 •101 •076	•510 •475 •403 •336 •291 •246 •208 •167 •130 •064 •000	.526 .525 .469 .395 .348 .293 .247 .197 .1941 .048	.024 .073 .150 .250 .350 .450 .550 .750 .850 .900
	• 000	•220	•274	M • 333	= 0.900;			t -1•196	795	- 003	000
Upper surface	.020 .073 .150 .250 .350 .440 .550 .650 .750 .850	• 342 • 162 • 076 • 009 • 042 • 066 • 072 • 069 • 053 • 023 • 023	2752 .057 015 077 121 138 131 119 093 046 .008	-121 -073 -133 -181 -221 -221 -199 -170 -125 -069	-087 -235 -259 -290 -338 -313 -279 -220 -159 -086 -006	- 1	-1.265 977 716 643	-1.196 -1.203 -1.166 -1.091 -1.069 -1.004 896 817 740 610 515	785 810 819 848 858 848 821 795 766 745 714 683	897 934 849 836 824 802 780 769 758 739 7739 701	.000 .020 .073 .150 .250 .350 .440 .550 .750 .850 .923
Power surface	• 024 • 073 • 150 • 250 • 350 • 450 • 550 • 650 • 750 • 850 • 900	805 678 647 691 482 333 205 120 048 006 024	467 356 336 268 216 151 090	417 183 182 174 143 125 084 001 001 001 0035 048	075 055 067 067 069 057 028 001 035 060 067	•144 •077 •037 •009 •002 •005 •018 •036 •064 •080 •083	.370 .267 .194 .124 .104 .099 .099 .110 .106	•473 •389 •314 •249 •212 •183 •159 •138 •119 •083 •050	•534 •486 •417 •345 •303 •257 •221 •181 •149 •086 •033	.560 .552 .493 .425 .377 .328 .281 .237 .193 .114	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY'- Continued

(c) 40-percent-semispan station - Continued

								0	160	000	x/c
Γ	x/c	2 = -40 C	ι = -2 ⁰	z = 0°	$\alpha = 2^{\circ}$	ar = 740	ar = 80	. = 12 ⁰ o	ι = 16 ⁰ ο	t = 20°	K/ C
t				м =	0.940;	ı = 368 l	b/sq ft				
╀	- т		-00]	. 338	•302	090	1.050 -		1.070	861	•000
1	.000	.238	•280 •251	120	058	352 -	-1•061 -		1.030	• ~ / -	.020
I	020	330		075	216	401		1 • 129	983	882	•073
	•073	• 151	•051	142	243	379		1.014	916	902	• 150
	• 150	•065	028	199	300	395	586	970	852	893	• 250
	• 250	006	-•094		- 325	416	594	956	806	860	• 350
1	• 350	060	134	265	376	455	609	918	794	836	• 440
1	• 440	082	-•162	286	388	467	615	819	805	-∙830	• 550
	•550	088	155	262		473	627	758	796	819	•650
, Line	.650	086	131	189	392	462	614	693	773	798	•750
2	• 750 l	064	095	122	227	161	383	609	756	782	.85 0
1	850	024	044	066	047		147	506	718	754	• 923
	• 923	•028	•014	• 006	•020	002	-•1-1	•,,,,,	• /	}	
1	l l	l	ì						- 44	.580	.024
	•024	763	634	421	113	•124	• 355	• 472	• 546 • 495	569	073
- }	073	612	- 493	186	085	058	•248	• 384	424	512	.150
١	150	547	- 375	204	102	•014	.178	• 309	354	445	250
,	250	533	- 372	226	111	012	•127	• 248	• 312	396	.350
2011		469	346	184	-•101	016	•102	•209		348	450
ĭ [• 350	416	344	159	090	016	•080	•175	•268		550
3 1	• 450	372	270	094	051	•001	•074	♦153	• 235	•308	•650
- 1	• 550		111	047	011	•023	●075	•135	♦195	+263	•750
TOMOT	• 650	305		002	030	.054	.081	•117	•167	•219	
ð	• 750	115	028	•038	063	076	.074	•084	•108	149	.850
۱ ا	■850	•003	•023	•052	073	•083	061	• 054	•062	095	•900
	• 900	•032	●040	• 032							
		L	L	М	= 0.980;	q = 385	lb/sq ft				
		1	205	• 356	•336	.026	-1.020	-1.080	-1.161	-1.197	•000
	•000	• 260	•295		022	288	-1.009	-1.103	-1-178	-1.181	•020
	•020	.336	• 257	052	191	356	-4904	-1.027	-1.130	-1.161	•073
	•073	•150	• 053		219	- 359	538	913	-1.141	-1.120	•150
	• 150	•060	-,026	119	268	368	551	866	-1.136	-1.069	•250
õ	● 250	024	101	187		392	540	851	-1.148	-1.031	•350
surface	• 350	077	172	236	310	422	562	842	-1.158	983	• 440
Ħ	. 440	115	204	286		442	569	821	-1.156	961	•550
	•550	140	227	310	1		584	774	-1.123	928	.650
Upper	•650	157	240	323		454	576	727	870	876	•750
dd	• 750	166	256	324		452	1	669	802	854	.850
Þ	850	128		308	371	435		446	742	816	•923
	• 923	021	074	132	180	283	-6517	1	•••		
						1	.262	.494	•564	•605	.024
	.024	745		394	113		•363 •259	402	512	598	.073
	073	592	454	180				• 326	. 444		• 150
	• 150	516		176				1265	.380		•250
	. 250	447						229	1		● 35 0
Q.	• 350	434			•			194	1 111		0450
ace		418	-•319					174			•550
rface	450			219				152			.650
surface	• 450 • 550	384			- 1 776	3 -•031					• 750
	1 7111			20		·		1 774			
	1 7111	359	279	1		009		• 134	1		
	• 650 • 750	359 31	279	16	08	009	03t	•094	•164	200	850
Lower surface	1 7111	359	279 240 165	160 08	608! 800	7 .009	03t		•164	200	850

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(c) 40-percent-semispan station - Continued

	x/c	a = -4°	a = -2°	$\alpha = 0^{\circ}$	a = 20	a = 40	a = 80	a = 12°	a = 16°	a = 20°	x/c
				М	= 1.030;	q = ½00	lb/sq ft		I	L	1
Upper surface	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850	•318 •381 •202 •116 •029 •038 ••067 ••102 ••111 ••132 ••119 ••086	• 352 • 308 • 113 • 033 • • 033 • • 104 • • 139 • • 161 • • 176 • • 188 • • 174 • • 121	.398 .194 001 066 127 175 220 240 254 261 253 181	.389 .046 125 156 204 242 303 316 324 308 230	•118 -205 -282 -279 -295 -323 -350 -369 -381 -381 -366 -292	834 832 760 453 457 453 471 482 496 494 474 346	815 741 702	-1.024 -1.032 -1.042 -1.046 -1.045 -1.057 -1.058	-1.094 -1.102 -1.089 -1.095 -1.115 -1.118 -1.112 -1.106 -1.079 -1.033 746 775	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850
Lower surface	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850	637 477 400 332 330 326 306 287 242 192 148	537 391 264 253 259 252 240 221 183 141 104	352 139 121 149 175 168 152 118 079 052	063 027 039 080 084 113 100 085 051 021 005	.152 .103 .052 .004 006 027 018 010 .020 .035 .029	.403 .304 .229 .178 .152 .126 .119 .115 .116 .094	•537 •448 •375 •314 •279 •246 •223 •202 •187 •148 •112	.613 .562 .497 .428 .392 .352 .320 .291 .263 .214	.654 .647 .589 .527 .486 .442 .404 .366 .330 .269 .224	•024 •073 •150 •250 •350 •450 •550 •650 •750 •850 •900
Upper surface	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850 .923	•358 •389 •212 •133 •058 •000 ••040 ••066 -•083 -•099 -•093 -•063	• 379 • 308 • 122 • 055 • • 012 • • 064 • • 132 • • 149 • • 160 • • 155 • • 125	M = • 434 • 222 • 035 • 028 • 081 • 121 • 161 • 187 • 201 • 210 • 201 • 173	1.125; q .429 .097 -079 -115 -162 -197 -226 -246 -267 -274 -262 -231	230 128 221 228 2253 274 292 309 329 321 283	665 681 630 524 385 405 414 406 427 434 409 343		896 911 889 864 871 865 873 866 843 748 669	914 920 916 915 915 914 913 889 841 634 615	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850
Lower surface	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850	613 430 349 278 248 261 259 247 205 161 140	545 355 220 227 187 193 181 150 107	331 119 085 092 092 117 118 106 073 041	082 019 015 035 048 070 068 056 023 .001	•151 •117 •085 •030 •019 •008 •003 •010 •037 •060 •065	• 398 • 299 • 234 • 178 • 164 • 141 • 143 • 146 • 162 • 158 • 141	.543 .459 .385 .333 .307 .280 .268 .256 .252 .223	.656 .604 .546 .485 .458 .424 .402 .371 .352 .312 .275	.726 .716 .666 .608 .573 .532 .498 .463 .429 .373	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850

TABLE III. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(c) 40-percent-semispan station - Concluded

Γ	x/c	or = -140	a = -2°	$\alpha = 0_0$	$\alpha = 2^{\circ}$	a = 4°	$\alpha = 80$	a = 120	$\alpha = 16^{\circ}$	$\alpha = 20^{\circ}$	x/c
t				М	= 1.200;	q = 436	lb/sq ft			— т	
Upper surface	•000 •020 •073 •150 •250 •350 •440 •550 •650 •750 •850 •923	.405 .420 .242 .157 .083 .031 -012 045 069 085 082	.432 .351 .165 .086 .017 032 070 101 122 136 128	.481 .264 .073 .003 051 098 131 153 186 188 183	•467 •124 ••040 ••083 ••116 ••150 ••207 ••230 ••239 ••226 ••196	.304 056 168 180 195 222 248 255 281 272 239	-•479 -•541 -•482 -•430 -•366 -•340 -•364 -•367 -•372 -•359 -•318	760 747 723 691 649 630 587 422 418 437 436	792 793 882 724 681 637 614 599 588 467	759 746 762 763 763 775 775 789 789 765 731	•000 •020 •073 •150 •250 •350 •440 •550 •650 •750 •850 •923
Lower surface	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850	581 399 301 224 203 223 212 177 142		077 075 096 111 110 073	053 051 024	.003 .022 .067	•422 •327 •260 •189 •172 •133 •127 •119 •151 •187	•271 •273 •278 •267	• 326	•721 •697 •640 •585 •553 •514 •488 •460 •433 •389 •352	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(d) 60-percent-semispan station

	x/c	a = _4°	$\alpha = -2^{\circ}$	$\alpha = 0^{\circ}$	$\alpha = 2^{O}$	a = 40	a = 80	$\alpha = 12^{\circ}$	a = 16°	a ~ ~ 0	x/c
	 	1	I	L	= 0.800;	<u></u>		ــــــــــــــــــــــــــــــــــــــ	m = 10°	$\alpha = 20^{\circ}$	1 x/c
	 	T	T			т		· · · · · · · · · · · · · · · · · · ·	1		
1	•000 •025	•116	•336 •313	• 476 • 149	-0112	-•323 -•676	-•981 -•949	-•781 -•773	821 711	-•787 -•725	•000 •025
	●075	•260	♦164	•032	163	406	929	744	686	689	075
e e	• 150	•153	•060	~•060	205	371	909	768	-+686	699	150
fac	• 250 • 350	•093	•010	091	187	323	896	-•756	669	687	•250
surface	450	•047	030	-•109	194	303	878	~•735	-•649	~.675	●350
1	•550	011	061	128	179	240	7.7				• 45 0
Upper	•650	027	074	120	165	-•248 -•212	-•717 -•575	-•672 -•626	624 605	~ . 664	•550
l g	•750	024	059	095	123	161	377	595	- •586	645 630	•650 •750
_	●850	004	033	056	070	095	194	-+541	- ∙568	620	● 85 0
	• 900	•015	-•013	032	040	055	120	533	561	607	900
İ	• 925									1	•925
	•040	642	-•553 -•518	255 169	006	•196	●366 ●284	• 436	• 469 • 417	• 484	•040
i	•150	574	-•519	128	-•022 -•029	•130 •105		• 367		• 453	•091
ce	• 250	607	482	100	010	•082	•238 •192	•313 •257	• 372 • 308	•410 •346	•150 •250
surface	●360	618	-•281	080	003	070	•164	•208	• 250	292	•250 •360
Ϊä	• 450	-∙555	-+117	053	•006	•065	•143	•178	207	•237	•450
•	●550 ●650	419	043	032	•020	•068	ø128	•143	.161	•183	• 550
Lower	•800	210 -057	-•006 •037	• 001	•042	•078	•128	•118	•118	•134	• 650
្ម	874	100	•049	•039 •043	•069 •069	•091	•114	• 054	028	•033	•800
	••••	1	•047	• 0 4 3	•009	•086	●096	-•009	-•047	047	•874
ĺ											
		·	L	M	= 0.900;	q = 358	lb/sq ft		·		
	•000	•124	• 342	• 462	•354	174	-1.277	871	846	837	•000
	●025 ●075	•381	• 295	• 148	155		-1.400	800	764	756	025
	• 150	•249 •138	•146 •040	• 009	211		1 • 326	-•726	708	-0714	•075
ခ	• 250	•080	-009	088 118	-•272 -•256	465	1.251	726	710	723	• 150
surface	• 350	•033	049	138	254	482	-e937 -e747	-•714 -•703	-•697 -•686	715 708	•250
In:	ø 450				127	- , , ,	• • • •	•,•,	-•000	-• 108	•350 •450
	●550	-•022		-•148	223	240	539	672	667	693	• 550
Upper	♦650 -750	-•039		143	198	240	363	-+657	649	680	•650
υp	●750 ●850	-•033 -•009	070 040	115	149	173	-•248		-•637	670	•750
	900	013		068	088	-•098 -•055	-+155 - 100		622	665	850
	925		••••	• • • •	-•050	-•055	108	577	-•610	656	•900
		l		- 1	ĺ				l	}	•925
	•040	773	590	-•351	031	.161	•339	•422	• 472	504	•040
	•091	730	536	-•208	03B	•102	262	356	422		091
0,	• 150 • 250	706		-•169	030	•080	•220	• 302	• 378		•150
surface	• 360	-•713 -•713			019	•066	•173	•247	•313		•250
lr.f.	•450	684		-•098 -•069	019 003	•056 •055	•147	•201	•260		• 360
SU	• 550	545		038	.016	062	•131 •122	•167	•221		• 450
P.	•650	256		- 005	•040	076	120	103	•177 •134		•550 •650
Lower	800	•114	•037	.040	.073	096	114	.042	059		800
7	874	•138	•050	•052	•072	•089			006		874
		ł	İ	1	Ì					-	ļ
]		i	-				İ

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY . Continued

(d) 60-percent-semispan station - Continued

	x/c	a = -4°	a = -2°	α = 0°	$\alpha = 5_0$	α = 4°	$\alpha = 80$	a = 12 ⁰ a	. = 16° a	. = 20 ⁰	x/c
				М	= 0.940;	q = 368	lb/sq ft				
Upper surrace	.000 .025 .075 .150 .250 .350 .450 .550 .650 .750 .850 .900	•151 •355 •227 •118 •063 •013 -•034 -•047 -•035 -•014 •006	.327 .282 .126 .023 .018 .058 .091 .072 .039 .017	.443 .108 022 127 155 170 157 146 113 065 033	-362 116 210 295 320 342 333 155 113 072 038	4412 440 439 477 488 506 222 054 013	-1.100 -1.116 -1.069 914 627 666 642 546 404 365	1.070 778 809 785 738 691 670 649 605 602	744 733 724 689 680 665 654	950 797 757 772 768 755 739 723 712 709 697	.000 .025 .075 .150 .250 .350 .450 .550 .650 .750 .850 .900
Lower surface	.040 .091 .150 .250 .360 .450 .550 .650 .800	752 681 643 684 681 593 472 323 054 033	660 580 559 528 456 323 204 097 002 031	403 249 186 150 107 076 039 002 .045	088 096 088 055 037 022 .005 .041 .075 .083	•128 •070 •049 •036 •039 •049 •070 •097	.313 .231 .186 .149 .122 .103 .090 .093 .081	•418 •346 •289 •242 •197 •166 •134 •110 •059 •007	.477 .430 .385 .323 .270 .229 .190 .147 .083	.520 .495 .453 .393 .339 .294 .247 .201 .120 .048	.040 .091 .150 .250 .360 .450 .550 .650 .800
Upper surface	• 000 • 025 • 075 • 150 • 250 • 350 • 450 • 550 • 750 • 850 • 900 • 925	•192 •336 •193 •079 •018 •041 -•114 -•138 -•064 -•041	246 028	. 428 . 115 . 025 . 149 . 199 . 233 . 307 . 340 . 361 . 184 . 039	-381 -070 -177 -268 -296 -343 -378 -409 -450 -380	q = 385 •094 ••469 •383 •427 •403 •431 -483 •490 •524 •515 •376	856 -1.060 -1.039 -1.004 930 827 597 643 665 666	-1.129 -1.144 -1.030 -1.054 -1.011 963 851 833 786 730 709	-1.102 -1.052 896 939 912 880 815 778 755 743	831 824 776 806 803 803 773 778 773 773	.000 .025 .075 .150 .250 .350 .450 .550 .750 .850 .900
Lower surface	650	728 658 638 681 719 697 627 508 233		221 154		-009 -005 -016 -020 -027 -018 -007	•052 •034	●084	.504 .450 .406 .350 .301 .265 .225 .188 .123	.551 .526 .485 .429 .376 .331 .285 .242 .166	.040 .091 .150 .250 .360 .450 .550 .650 .874

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(d) 60-percent-semispan station - Continued

	x/c	a = 40	a = -2°	$\alpha = 0^{\circ}$	$\alpha = 2^{\circ}$	a = 40	a = 80	a = 12°	2 166	$\alpha = 20^{\circ}$	T /
		_L	L	<u> </u>	= 1.030	q = 400			u = 16	$\int \alpha = 20^{\circ}$	x/c
Upper surface	.000 .025 .075 .150 .250 .350 .450 .550 .650	•262 •370 •234 •120 •053 -•013 -•081 -•114 -•139	• 394 • 301 • 150 • 039 • 018 • 077 • 146 • • 182 • • 212	.468 .183 .036 080 134 176 230 264 293	•435 -009 -112 -197 -227 -269 -308 -332 -376	•168 -366 -308 -351 -339 -363 -409 -423 -442	665 885 873 841 782 718 509 550 576	T	-1.030 997 973 984 944 912 856 828 794		.000 .025 .075 .150 .250 .350 .450 .550
	• 850 • 900 • 925	-•139 -•097	-•202 -•163	-•297 -•263	-•369 -•348	-•451 -•432	•581 •574	722 610	766 752	~•787 ~•779	•850 •900 •925
Lower surface	.040 .091 .150 .250 .360 .450 .550 .650 .800	616 533 503 542 583 564 520 447 253 169		389 256 201 190 210 196 175 137 061 026	100 113 098 092 125 107 091 054 .007 .020	.102 .046 .029 .007 -000 .002 .009 .024 .044	•339 •262 •220 •178 •149 •129 •113 •107 •086 •059	•467 •398 •347 •296 •255 •225 •194 •172 •130 •089	•550 •503 •460 •403 •355 •322 •287 •253 •196 •145	•596 •573 •535 •482 •433 •392 •348 •310 •236 •175	.040 .091 .150 .250 .360 .450 .550 .650 .800
				M =	1.125; q	= 421 1	b/sq ft	<i></i>			
Upper surface	.000 .025 .075 .150 .250 .350 .450 .550 .650 .750 .850 .925	. 323 . 398 . 260 . 149 . 087 . 027 - 044 - 078 - 101 - 106 - 099	-•145 -•176 -•184	. 499 .231 .088 022 066 119 179 199 244 245	.481 .059 047 133 163 202 261 283 308 320 316	• 253 • 241 • • 226 • • 282 • • 272 • • 299 • • 338 • • 366 • • 388 • • 396 • • 394	405 730 699 683 643 612 412 454 485 495	822 891 873 865 841 829 755 783 763 707 689	919865769813801782736706668628606	889 851 784 816 788 758 723 689 655 639 620	•000 •025 •075 •150 •250 •350 •450 •550 •650 •750 •850 •900 •925
LOWET SUFIACE	• 040 • 091 • 150 • 250 • 360 • 450 • 550 • 650 • 800 • 874	452 422 436 429 421 414 394 287	-•403 -•365 -•312 -•293 -•295 -•276 -•233 -•161	-•159 -•146 -•138 -•109	063 075 069 055 092 084 087 049 003 017	.131 .070 .051 .034 006 002 .002 .026 .067	•341 •264 •228 •187 •175 •159 •158 •162 •154 •133	.496 .427 .381 .338 .304 .277 .254 .239 .202	•614 •571 •534 •479 •437 •406 •378 •343 •294	•682 •657 •650 •573 •527 •490 •450 •414 •346 •290	.040 .091 .150 .250 .360 .450 .550 .650 .800

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(d) 60-percent-semispan station - (oncluded

x/c	a = -40	$\alpha = -2^{\circ}$	$\alpha = 0^{\circ}$	$\alpha = 5_0$	$\alpha = 4^{\circ}$	ar = 80	a = 120	α = 16°	$\alpha = 50^{\circ}$	x /c
			М	= 1.200;	q = 436 1	Lb/sq ft				
.000 .025 .075 .150 .250 .350 .450 .650 .750 .850 .900	.340 .408 .273 .157 .093 .043 013 042 075 091 085	.438 .341 .196 .084 .026 027 081 101 143 149	.482 .240 .105 002 050 091 151 172 201 226 219	.490 .090 016 104 127 165 215 239 270 284 287	.301 146 167 236 228 252 275 310 336 348	204 586 557 555 529 514 458 374 419 430	652 758 726 727 708 705 675 671 673 652 664	835 791 788 818 815 790 800 748 663 619	783 709 731 742 744 753 738 766 741 729 741	.000 .025 .075 .150 .250 .350 .450 .550 .750 .850 .900
.040 .091 .150 .250 .360 .450 .550 .650 .800	575 454 397 369 337 301 286 283 230	597 451 352 253 211 196 185 153 103	365 222 123 123 123 120 108 076 031 001	066 062 053 070 052 039 007 .037 .063	•132 •074 •060 •048 -•002 •020 •031 •062 •103 •123	.337 .261 .223 .187 .157 .185 .176 .191 .208	• 486 • 422 • 382 • 350 • 327 • 309 • 298 • 290 • 264 • 233	•597 •548 •513 •464 •427 •399 •374 •347 •306 •268	.671 .641 .609 .563 .520 .485 .450 .419 .361	.040 .091 .150 .250 .360 .450 .550 .650 .800

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF O.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(e) 80-percent-semispan station

	x/c	a = -40	a = -2°	a = 00	a = 20	α = 14°	a. = 80	a = 12°	a = 16°	a = 20°	x/c
				ŀ	1 = 0.800	; q = 310	lb/sq f	`t	<u> </u>		
Upper surface	•022 •076 •150 •250 •370 •450 •550 •600 •650 •750 •850 •900	.418 .307 .222 .144 .078 .036 .000 030 053 097	.361 .224 .137 .070 .016 015 038 055 047	•258 •106 •030 -•021 -•062 -•086 -•098 -•108 -•088 -•069	.013 081 121 143 158 167 162 155 123 089	662 340 322 298 287 245 245 213 166 114			504 501 491 481 473 457 457 445		.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850
Lower surface	•078 •150 •250 •360 •450 •560 •610 •700 •800	463 441 424 421 427 438 425 412	477 471 476 499 471 432 346 175	531 351 152 070 019 007 -023 -045	062 052 015 007 013 .025 046 .073	•139 •086 •093 •070 •070 •069 •087 •095	•287 •210 •184 •141 •088 •075 •064 •030	•333 •255 •209 •157 •076 •058 •034	• 374 • 303 • 251 • 189 • 095 • 071 • 041	• 392 • 343 • 284 • 218 • 111 • 087 • 050 • • 008	.078 .150 .250 .360 .450 .560 .610 .700 .800
Upper surface	• 022 • 076 • 150 • 250 • 370 • 450 • 550 • 600 • 650 • 750 • 850 • 900	.416 .308 .223 .146 .082 .042 .009 026 042 079	• 353 • 219 • 134 • 008 • 008 • 025 • 048 • • 070 • • 061 • • 050	.246 .099 .021 037 081 119 127 106 083	= 0.900; 022 118 160 184 210 215 204 194 152 109	q = 358 765577367349360342293254183116	1b/sq ft -1.146 882 868 820 754 682 627 569 511 455	529 519 509 494 483 468 472 468 465 464	572 564 558 548 527 525 525 524 519 513	622 617 609 600 593 583 582 577 571 565	.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850
TOWET SULTREE	• 078 • 150 • 250 • 360 • 450 • 560 • 610 • 700 • 800	508 498 488 495 539 546 539 509	486 478 479 501 497 481 427 307	542 404 222 099 023 011 -024 -053	057 052 021 007 .021 .030 .057 .080	•142 •085 •093 •071 •072 •072 •089 •102	•282 •209 •183 •145 •106 •095 •089 •063	• 324 • 251 • 209 • 152 • 075 • 055 • 036 • • 003	• 369 • 304 • 254 • 198 • 105 • 082 • 059 • 009	•401 •356 •302 •242 •138 •115 •082 •031	.078 .150 .250 .360 .450 .560 .610 .700

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(e) 80-percent-semispan station - Continued

1	x/c	a = -40	x = -2°					= 12 ⁰ a	= 16° a	= 20°	
Γ				M = (o.940; q	= 368 lb	/sq It				
╁		433	.361	.243	079	685	1.231			•••	•022 •076
	•022 •076	•411	228	093	174		1.131				150
ı	150	219	143	.012	210		1.067				250
١	250	144	072	039	204		1.046	573			.370
1	370	.082	016	087	206	-•492	997 903	-•564 -•551			450
1	450	•041	015	115	220	549	765	527	582		•550
	•550	•006	044	-•125	-•216		-•/05		-		•600
1	•600		245	137	198	243	584	516	579		•650
	•650	024	065	114	161	100	482	503	567	622	• 750
۱,	• 750	040	059	089	-108	061	432	496	563	615	· 850
	•850 •900	070	047	-,087	•100					į	•900
١									271	•415	.078
	.078	529	504	524	071	•107	•247 •177	•313 •240	•371 •308	373	.150
	• 150	490	491	390	064	•059 •079	159	205	264	.321	• 250
1	250	465	488	228	020 009	061	127	151	207	•263	• 360
3	• 360	443	511	110	009	• • • • •	• • •				• 450
	• 450		620	023	•013	.070	•098	•079	•120	•170	•560
1	•560	492	530 532	011	.026	.071	•091	•062	099	•143	•610 •700
ı	•610 •700	517 485	-500	025	.047	•091	•096	•050	•077	•114 •064	.800
10.00	• 800	447	404	053	•073	•107	●085	•014	•036	•004	• 600
1							İ				
		<u> </u>	<u> </u>	M =	0.980;	q = 385 1	b/sq ft				
	•022	• 367	.276	175	.008	372	1.140	978 836	650 659	750 742	•022 •076
	076	0255	•134	•018	136	422	999	837	668	743	• 150
	• 150	•170	•047	073 137	208 254	407	970	816	671	744	•250
a)	• 250	•098	034	212	310	441	-+952	793	675	741	•370
surface	• 370	•040	146	268	351	480	927	765	671	729	•450 •550
ırf	• 450 • 550	016	075	314	388	529	940	747	682	736	.600
	600			1			005	- 720	687	728	650
er	650	035	057	342	422	1	905 891	730	684	719	.750
Upper	.750	036		083	442		8891	686	677	711	850
⊃	• 850 • 900	-•054	037	•001	-•255	520					•900
							•203	•327	•398	• 441	.078
	•078	693	729	694	337	•009 •028	132	256	•337	•403	150
	• 150	637			065			• 220	•294	• 351	• 250
_	• 250	592 562			061			•171	•243	•298	• 360
ce	• 360	-0.704	-•094	•/17	••••				1.50	207	560
surface	• 450 • 560	517	595	038	008			•104	•159	•207	610
S	610	52		• 005	•009			.088	1119	157	.700
		545	455					047	080	•110	.80
Lower	•800	552	200	•092	•081	052	•523				
ı		1	1	1	1		1	1			1

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(e) 80-percent-semispan station - Continued

	x/c	a = _40	$\alpha = -2^0$	$\alpha = 0^{\circ}$	$\alpha = 2^{\circ}$	a = 40	a = 80	a = 12°	α = 16°	α = 20°	x/c
		<u> </u>		<u> </u>	= 1.030;	q = 400	lb/sq ft	1	1- 10	u = 20	
Upper surface	•022 •076 •150 •250 •370 •450 •550 •600 •650 •750 •850 •900	.380 .263 .173 .091 .013 039 072 117 136 117	• 321 • 187 • 098 • 020 • 049 • • 104 • • 145 • • 222 • • 231	• 225 • 079 • 013 • 077 • 141 • 188 • • 237 • • 279 • • 312 • • 334	.075 066 137 183 243 288 335 355 389 414	254 313 337 329 364 397 441 473 489 502	962 870 835 816 803 781 807 780 770 769	-1.168 -1.113 -1.075 -1.049 -1.020 983 990 896 799 744	823 766 760 754 719 722 709 6690 674	637 636 642 667 667 667 678 676 671	.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850
Lower surface	•078 •150 •250 •360 •450 •560 •610 •700 •800	714 692 690 679 626 622 564 531	681 679 668 651 574 545 483 381	653 539 408 329 202 163 094 042		.008 021 .011 .002 .011 .014 .032 .043	•238 •170 •154 •116 •083 •074 •078	•357 •289 •253 •206 •148 •134 •123 •100	.449 .395 .346 .300 .226 .207 .188 .152	.500 .461 .415 .362 .274 .256 .229	.078 .150 .250 .360 .450 .560 .610 .700
Upper surface	•022 •076 •150 •250 •370 •450 •550 •600 •650 •750 •850 •900	.407 .293 .208 .137 .066 .008 023 061 092	•339 •209 •120 •054 -•008 -•060 -•106 -•137 -•169 -•193	M = .265 .126 .041022078129171207234258	1.125; q -120 -010 -079 -119 -167 -211 -262 -284 -311 -337	- 421 1 - 136 - 225 - 267 - 267 - 283 - 315 - 357 - 383 - 404 - 423	779 693 671 657 651 641 670 646 628 624	956 897 868 850 821 785 810 792 717 665			.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850 .900
Lower surface	•078 •150 •250 •360 •450 •560 •610 •700 •800	-•552 -•541 -•489	584 555 540 478 449 395	-•178 -•153	393 172 141 128 071 046 003 .047	.007 -014 .006 .008 .046 .057 .087	•273 •213 •204 •177 •156 •149 •157 •156	.405 .344 .314 .276 .232 .221 .213	•536 •485 •445 •401 •332 •316 •302 •269	•558 •514 •465 •382 •363 •339	.078 .150 .250 .360 .450 .560 .610 .610

Lower

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(e) 80-percent-semispan station - Concluded

ſ	x/c	a = 40	a. = -2°	$\alpha = 0^{\circ}$	a = 2°	a = 40	$\alpha = 80$	a = 12 ⁰	a = 160	$\alpha = 20^{\circ}$	x/c
ł				М	= 1.200;	q = 436	lb/sq ft				
Upper surface	.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850	.416 .309 .226 .157 .094 .043 001 040 072	-363 -239 -156 -092 -027 014 060 103 136	• 287 • 154 • 073 • 018 • • 087 • • 128 • • 167 • • 196 • • 228	.164 .035 033 073 114 152 203 234 257 280	035 138 199 194 222 252 287 312 332 351	590 521 512 508 516 556 550 543 513 507		818 799 793 801 792 761 779 745 710 670	734 707 696 702 692 660 672 648 630 597	.022 .076 .150 .250 .370 .550 .600 .650 .750 .850
Lower surface	•078 •150 •250 •360 •450 •560 •610 •700 •800		576 418 279 258 219	521 441 266 238 189 173 131 054	083 067 031	.001 008 .000 008 .018 .029 .074	•263 •198 •202 •178 •176 •184 •204 •213	.417 .358 .339 .304 .266 .260 .259 .247	•503 •452 •417 •380 •321 •308 •300 •277	•502 •458 •388 •372 •356	.078 .150 .250 .360 .450 .560 .610 .700

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(f) 95-percent-semispan station

	x/c	a = -40	$\alpha = -2^{\circ}$	$\alpha = 0^{\circ}$	a = 2°	a. = 40	a = 80	$\alpha = 12^{\circ}$	α = 16°	a = 20°	x/c
_					M = 0.	800; q =	310 lb/s	q ft	·	<u> </u>	<u> </u>
Upper surface	•073 •150 •250 •350 •460 •550 •660 •750 •800	.324 .214 .118 .048 -020 -075 -109 -122	• 285 • 175 • 086 • 020 •• 035 •• 076 •• 097 •• 106	•210 •095 •017 ••036 ••074 ••101 ••095 ••066	.050 047 087 115 135 142 118 079		395 370 344 324 303 283 264 247	328 326 325 318 317 317 312 310	370 371 368 367 367 367 367 370	440 438 436 435 437 441 441	•073 •150 •250 •350 •460 •550 •660 •750 •800
Lower surface	• 100 • 200 • 250 • 350 • 450 • 550 • 600 • 690	-•242 -•217 -•208 -•207 -•192 -•171 -•166 -•156.	282 254 249 230 213 202 199 191	438 393 392 346 280 178 113 016	150 097 068 046 032 .007 .019	.077 .049 .043 .033 .032 .026 .029	•169 •108 •087 •037 •005 -•019 -•027 -•049	•224 •152 •113 •056 •004 -•033 -•047 -•078	•268 •195 •151 •089 •019 ••032 ••051 ••092	•285 •213 •176 •099 •018 -025 -•054 -•103	•100 •200 •250 •350 •450 •550 •600 •690
		······································			M = 0.90	0; q = 3	58 lb/sq	ft		1	
Upper surface	.073 .150 .250 .350 .460 .550 .660 .750	.337 .229 .131 .056 028 093 141 155	• 294 • 184 • 090 • 020 • 044 • 095 • • 117 • • 118	•210 •092 •010 ••051 ••105 ••133 ••116 ••079	-018 -076 -124 -170 -190 -181 -149 -095	480 295 306 306 225 221 179 122	453 442 422 406 386 374 360	391 392 391 395 395 398 403	436 433 434 429 427 427 430 429	493 490 487 483 480 479 480	•073 •150 •250 •350 •460 •550 •660 •750 •800
Lower surface	• 100 • 200 • 250 • 350 • 450 • 550 • 600 • 690	240 219 220 212 199 193 189	-•229 -•222 -•217	463 412 406 364 305 223 166	150 105 067 041 021 -011 -021 -041	.088 .055 .045 .025 .011 .021 .024	.204 .139 .106 .049 007 038 053	091		•297 •234 •197 •123 •045 •017 •048 ••109	•100 •200 •250 •350 •450 •550 •600 •690

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(f) 95-percent-semispan station - Continued

٢	x/c	a = 40	a = -2°	$\alpha = 0^{\circ}$	a = 2°	a = 40		a = 12 ⁰	x = 16°	ı = 20°	x/c
				M =	0.940; q	= 368 lb	/sq ft				
Upper surrace	• 073 • 150 • 250 • 350 • 460 • 550 • 660 • 750 • 800	.347 .243 .145 .063 023 098 154 173	•310 •200 •107 •036 ••034 ••085 ••108 ••107	.211 .095 .011 057 122 149 125 079	•002 -•081 -•128 -•177 -•238 -•189 -•139 -•088	750 458 443 302 150 172 159 110	476 445 428 406 392 385 378 367	453 446 442 440 437 440 442	485 479 476 471 469 467 469	551 547 542 534 530 527 526 521	.073 .150 .250 .350 .460 .550 .660 .750
Lower surface	•100 •200 •250 •350 •450 •550 •600 •690	317 292 287 277 260 246 237 224	-•335 -•306 -•304 -•290 -•274 -•273 -•272 -•281	434 389 397 346 293 223 168 060	154 119 074 061 043 .011 .021	.072 .045 .049 .020 .002 .021 .027	•153 •101 •070 •020 -•035 -•083 -•093 -•121	•213 •145 •114 •050 ••018 ••072 ••096 ••142	.282 .218 .180 .114 .044 025 057 116	•319 •261 •223 •161 •086 •013 -•016 -•082	•100 •200 •250 •350 •450 •550 •600
		<u>.L</u>		М :	= 0.980;	q = 385	lb/sq ft				r
Upper surface	.073 .150 .250 .350 .460 .550 .660 .750	.341 .237 .148 .071 014 091 155 174	•301 •196 •109 •037 -035 -092 -•111 -•102	•158 •064 •005 •033 •084 •114 ••095 ••046	-•311 -•394 -•392	360 413 435 464 488 532 565 525	-1.044 985 949 929 901 887 818 715	626 619 616 604 595 588 587	-•608 -•602 -•597 -•590 -•587 -•582 -•578	656 651 644 639 636 632 627	.073 .150 .250 .350 .460 .550 .660 .750 .800
Lower surface	•690	366 339 344 333 319 314 302		280 278 277 274 269	175 092 064 064 065	052 026 038 078 089	.078 .069 .021 042 099	•237 •171 •144 •086 •013 •042 •-066 114	.309 .250 .216 .152 .083 .014 -016	• 351 • 296 • 262 • 198 • 127 • 062 • 030 • • 040	•100 •200 •250 •350 •450 •550 •690

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(f) 95-percent-semispan station - Continued

	x/c	a = -40	a = -2°	$\alpha = 0^{\circ}$	$\alpha = 2^{\circ}$	a = 40	a = 80	$\alpha = 12^{\circ}$	a = 16°	a = 20°	x/c
				М	= 1.030;	q = 400	lb/sq ft	<u> </u>			L
Upper surface	.073 .150 .250 .350 .460 .550 .660 .750	•325 •214 •127 •054 -•032 -•124 -•199 -•186	• 269 • 161 • 073 • 001 • 092 • 190 • 283 • 288	•170 •063 -•012 -•082 -•155 -•252 -•351 -•385	•027 •074 •145 •196 •241 •328 •412 -•431	232 335 337 368 397 451 496 489	861 914 789 788 794 801 772 756	-1.100 -1.068 -1.038 -1.016 993 964 894 826	563 563 572 575 583 586 592 595	602 599 603 602 603 605 608	.073 .150 .250 .350 .460 .550 .660 .750
Lower surface	•100 •200 •250 •350 •450 •550 •600	558 505 489 470 447 421 410	528 478 468 441 416 399 394 397	687 617 599 541 491 447 406 326	386 276 235 186 157 094 070 057	087 115 083 061 072 084 076 085	•139 •093 •095 •058 •005 •043 ••064 ••098	•275 •214 •191 •140 •075 •017 -009 -•067	•371 •314 •278 •224 •159 •090 •061 ••003	.407 .355 .328 .267 .198 .139 .107	•100 •200 •250 •350 •450 •550 •600
				M =	1.1.25;	q = 421	lb/sq ft			l	
Upper surface	• 073 • 150 • 250 • 350 • 460 • 550 • 660 • 750 • 800	.365 .267 .188 .119 .043 047 134 159	• 293 • 197 • 123 • 058 • • 007 • • 099 • • 199 • • 231	•209 •115 •045 -•022 -•066 -•152 -•248 -•289	•101 •000 •071 •122 •166 •237 •324 •359	103 189 234 262 302 347 399 404	684 637 618 627 636 618 597	897 853 853 815 808 774 777 765	468 470 470 469 466 464 464	-• 481 -• 484 -• 492 -• 493 -• 489 -• 481 -• 491	.073 .150 .250 .350 .460 .550 .660 .750
Lower surface	• 100 • 200 • 250 • 350 • 450 • 550 • 600 • 690	612 563 543 480 439 459 454 457	522 511	693 619 571 382 300 245 210	563 328 245 245 247 116 058 .010	099 115 086 020 .012 .020 .022	•194 •147 •164 •138 •098 •058 •037 •005	•349 •299 •279 •238 •179 •129 •103 •053	•473 •423 •390 •340 •279 •213 •188 •126	•255 •228	•100 •200 •250 •350 •450 •550 •600

TABLE III.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR WING IN PRESENCE OF FODY - Concluded

(f) 95-percent-semispan station - Concluded

ĺ	x/c	α = -4°	a = -2°	$\alpha = 0^{\circ}$	a = 20	a. = 40	a = 8°	a = 12°	a = 16°	a = 20°	x/c	
	M = 1.200; q = 436 lb/sq ft											
Upper surface	•073 •150 •250 •350 •460 •550 •660 •750 •800	•368 •274 •205 •142 •086 •005 -•089 -•128	• 304 • 219 • 142 • 083 • 035 • 038 • • 131 • • 172	•231 •143 •067 •008 ••038 ••100 ••190 -•235	•139 •041 -•025 -•074 -•117 -•172 -•248 -•287	027 123 158 192 228 270 322 341	526 487 480 483 496 510 514 504	755 715 690 684 684 681 660 652	710 700 691 693 695 691 671 654	470 450 439 422 402 402 417 438	.073 .150 .250 .350 .460 .550 .660 .750 .800	
Lower surface	• 100 • 200 • 250 • 350 • 450 • 550 • 600 • 690	717 676 701 661 617 644 620 615	734 681 699 666 634 642 621	618 570 577 530 464 343 188	524 434 290 244 261 180 137 003	106 135 094 084 073 -005 -037 -084	.22C .156 .182 .167 .145 .131 .112	• 362 • 315 • 309 • 276 • 231 • 192 • 168 • 119	.447 .407 .381 .344 .294 .242 .219	•510 •473 •453 •404 •344 •301 •275 •216	•100 •200 •250 •350 •450 •550 •600 •690	

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY

(a) 12-percent-semispan station

	x/c	a = 40	α = -20	1	1	т	т	7			
	-				$\alpha = 2^{\circ}$	<u> </u>	<u> </u>		ο α = 16	0 a = 2	00 x/c
_	+	т	т	M	1 = 0.800	; q = 62°	7 lb/sq f	<u>`t</u>			
ace	•000 •032 •078 •150 •250	•183 •309 •195 •093 •015	•203 •109 •015	•514 •089 •017 -•060	•529 -•031 -•070 -•143	•498 -•163 -•167 -•226	•249 -•474 -•366 -•415	087 895 573 615		-1.59 -1.45	0 •032 • •078
Upper surface	• 350 • 450 • 550 • 650 • 760	003 048 085 063	056 065 107 138 108	127 129 161 191 153	198 192 223 247 197	276 262 287 307 244	-•447 -•413 -•429 -•436 -•331	619 552 511 460 391	602 582 612 607 529	828 733 663 648	3 • 250 • 350 • 450 • 550
ם	●840 ●926	050 057 033	-•089 -•081 -•053	-•123 -•106 -•063	159 128 079	-•192 -•155 -•092	247 188 110	343 269 168	-•464 -•403 -•305	579 538 545 508	•760 •840
e e	•035 •082 •150 •250	-•381 -•241	-•243 -•147	-•100 -•066	•028 •007	•141 •079	•358 •227	•543 •368	•685	.809	•082
r surface	• 350 • 450 • 550	-•229 -•242 -•227	153 174 170	086 113 113	028 060 067	•027 ••008 ••021	•147 •102 •080	•258 •203 •168	•3∧9 •284	•577 •436 •366	•150 •250 •350 •450
Lower	•650 •750 •850 •900	-•207 -•138 -•089 -•069	156 098 061 047	061 032 025	066 030 009 007	026 .002 .016	•061 •074 •073 •059	•135 •132 •111 •084	•239 •194 •172 •136 •095	•311 •258 •222 •164	•550 •650 •750 •850
				M	= 0.900;	q = 713		· · · · ·		•110	•900
	•000 •032	•310 •318	•471 •213	•549 •111	•560	•541 ••115	•380	•129	093	311	•000
ed I ace	•078 •150 •250 •350		063	•039 •053 •133	-•044 -•129 -•207	-•124 -•200 -•280	408	-•786 -•473 -•503 -•539	-1.338 708 623 637	-1.500 -1.464 675 706	•032 •078 •150 •250
	• 450 • 550 • 650 • 760	062 114 086 074	127 179 140 118	-•189 -•250 -•196	-•256 -•332 -•273	-•315 -•388 -•381	-•433 -•498 -•488	-•530 -•552 -•618 -•598 -•506	-•622 -•471 -•553 -•560	685 696 688 611	• 350 • 450 • 550 • 650
	• 840 • 926	-•050	-•067 -	- 082	-•170	191	-490	-•397	554 599 516	584 606 561	•760 •840 •926
	082 150 250	-•230 -	-•147 -	•087 •069	•039	•148 •079	•361 •230	•553 •376	•704 •495	•837 •606	•035 •082 •150
:	450 550 650	-•278 -•323 -•323	•211 - •235 - •213 -	• 143 • 157	•096 -	•021 •023 •040 •045	•146 •096 •070 •051	•263 •203 •165	• 366 • 299 • 250	•463 •394 •341	• 250 • 350 • 450 • 550
	850 -	·•113 -	•135 - •083 -	•088 - •051 -	•049 - •022	010 008 008	•067 •067	•130 •126 •103 •074	•205 •186 •144 •100	•204	•650 •750 •850 •900

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(a) 12-percent-semispan station - Continued

 		-01	- 00	7 - 20	v = 1,0	, = 80	a = 12°	a = 160	$\alpha = 20^{\circ}$	x/c
x/c	r = -40 0	L = -2							h	
			M =	0.940; 0	1 = 743 1	b/sq ft				
•000	. 361	503	•563	•578 •018	•562 -•087	-428 342	-206 704	008 -1.221	-1.421	.000 .032
			051	025	096	227	424	645		•078 •150
	105	027	044	115	174	1	1			• 250
250	.014	063	132	202				_		•350
• 350	010							604	678	·450
						473	574	621	670	•550
				325	364	477	573	445		•650 •760
		155	237	324	374	-•482	572		1	•840
840	096	-•138	175							926
●926	-•063	079	087	170	323	~ •309	- • • • •	.,,		
. 035	304	197	075	•045	•157	• 366	•558	•716	.853	.035 .082
•082 •150	204	136	065	•005	•083	•234	•382	•512	•625	•150 •250
• 250				050	010	. 1 4 4	-268	381	• 485	.350
							• 206	•314	•416	• 450
1				130	059	.058	•166	•266	• 364	•550 •650
			203	126	065	.034				750
750	327	254	116	071						850
•850 •900	293 212	-•126 -•069	062 044	038	012	•019	.067		1	•900
			М :	= 0.980;	q = 771			T		.000
▲000	.417	•538		•605					İ	032
•032	• 348				1					.078
1		1	1	1						•150
			106	160	215	323	421		1	•250 •350
	1	056	113	175	226	1	l			450
• 450	060	115	162	215					1	•550
• 550	150									•650
•650							l		Ì	•760
		1		1	402					840
• 926					385	-•487	574			•926
005	254	152	037	.074	•177	•383	.577	,		•035
	254	1 -•153	1		1		1 .	,		• 150
• 150	-•158	103	035	•030	•101	1 .723	••04			• 250
• 250		1.55	- 001	m.022	4027	157	.283	7	-	• 350
• 350						•097	• 224	4	1	• 450
450				1	079	1			1	•550 •650
650			223	173	1	1			1	750
.750										.850
• 850 • 900	306 316	1			1				,	•900
	000 032 078 150 250 350 450 650 760 840 926 035 082 150 250 350 450 650 750 850 900 000 032 078 150 250 850 900 032 078 150 250 650 760 850 900 032 078 078 078 078 078 078 078 078 078 078	.000	.000	000	M = 0.940; c	M = 0.940; q = 743 1 .000	M = 0.940; q = 743 lb/sq ft	M = 0.940; q = 743 lb/sq ft	M = 0.940; q = 743 lb/sq ft	M = 0.940; q = 743 b/sq ft

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(a) 12-percent-semispan station - Continued

	x/c	a = -40	a = -2°	α = 0°	a = 50	a = 40	a = 8°	$\alpha = 12^{\circ}$	a = 16°	a = 20°	x/c
		- 		М	= 1.030;	q = 803	<u> </u>	L			1
Upper surface	.000 .032 .078 .150 .250 .350 .450 .550 .650 .760 .840	.481 .401 .293 .182 .087 .065 .003 083 076 079 128	●298	.637 .202 .135 .040 058 063 112 181 187 199 245 238	.645 .106 .070 -018 -104 -120 -161 -228 -235 -247 -293 -281	.637 .012 .009 -082 -148 -164 -202 -267 -274 -335 -317	.543 211 121 189 244 253 285 346 356 368 420	-353 -517 -300 -298 -336 -348 -374 -435 -441 -452 -498 -495			000 .032 .078 .150 .250 .350 .450 .550 .650 .760 .840
Lower surface	• 035 • 082 • 150 • 250 • 350 • 450 • 650 • 650 • 850 • 900	177088153170221251241235246	096043104127180216199185195	•012 •017 -•044 -•075 -•131 -•165 -•153 -•140 -•151	.116 .076 .016 024 081 117 097 081 093	•219 •147 •080 •027 -•024 -•055 -•030 -•026 -•041	.430 .301 .205 .146 .108 .077 .090 .083 .062	.619 .448 .335 .272 .231 .193 .188 .167 .138			.035 .082 .150 .250 .350 .450 .550 .650 .750 .850
Upper surface	.000 .032 .078 .150 .250 .350 .450 .550 .650 .760 .840	.536 .337 .263 .169 .075 .059 .016 050 046 060 117 102	.600 .234 .180 .101 .022 001 040 102 100 113 167	617 156 123 046 -019 -044 -082 -139 -140 -154 -200	1.125; d 625 052 054019073094131183186199247236	1 = 856 1 -616 -033 -008 -074 -124 -141 -170 -219 -229 -240 -285 -269	b/sq ft	-486 460 293 261 275 286 306 359 365 402 401			.000 .032 .078 .150 .250 .350 .450 .550 .650 .760 .840
Lower surface	•035 •082 •150 •250 •350 •450 •550 •650 •750 •850 •900	195078121140189211200181185	088 135 163 150 132	-•123 -•107 -•091	-•061 -•045	•168 •148 •074 •061 •007 -027 -012 •001 -•004	•361 •278 •209 •162 •114 •091 •116 •122 •105	•583 •448 •350 •294 •259 •230 •237 •228 •208			.035 .082 .150 .250 .350 .450 .550 .750 .850

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(a) 12-percent-semispan station - Concluded

ſ	x/c	a = -40	a = -2°	$\alpha = 0^{\circ}$	a = 20	a = 40	a = 80	a = 120	a = 16° a =	20° x/c
ı				М	= 1.200;	q = 888	lb/sq ft	,		
Upper surface	.000 .032 .078 .150 .250 .350 .450 .550 .760 .840	.562 .332 .263 .154 .106 .091 .049 006 008 034 092	.612 .235 .193 .090 .048 .001 055 064 076 135	.633 .143 .040 006 016 045 099 112 114 173 165	.609 .067 .064 008 062 058 090 142 153 151 208 199	.632 043 .004 063 1108 1134 181 192 190 243 238	.600 275 150 147 186 196 208 250 250 258 310 309	.502 473 280 247 253 272 313 321 330 363 367		.000 .032 .078 .150 .250 .350 .450 .550 .650 .760
Lower surface	.035 .082 .150 .250 .450 .550 .650 .750 .850 .900	182 065 094 113 150 179 169 138 160	092 015 050 065 111 135 124 115	001 .039 004 018 069 092 081 092	.080 .085 .046 .029 023 044 035 039	•161 •139 •100 •079 •027 •012 •010 •004	•348 •260 •221 •187 •142 •107 •105 •105	•539 •430 •358 •305 •257 •221 •228 •227 •220		.035 .082 .150 .250 .350 .450 .550 .650 .750 .850 .900

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(b) 25-percent-semispan station

	x/c	a = -4°	a = -20	$\alpha = 0_0$	a = 20	a = 40	a = 8°	$\alpha = 12^{\circ}$	a = 16°	$\alpha = 20^{\circ}$	x/c
		·	I	М	= 0.800;	q = 627	lb/sq f	L	L	L	L
ę,	•000 •025 •076 •150	-•381 •306 •160	042 .211 .067	•325 •070 ••050	•413 -•116 -•177	•354 -•355 -•331	195 -1.204 645	708 -1.379 -1.211	-1.040 -1.331 -1.353	-1.163 -1.117 -1.098	.000 .025 .076
Upper surface	• 250 • 350 • 450 • 550 • 650 • 750 • 850 • 926	-002 050 074 070 066 045 020	073 118 134 120 108 076 038 .004	151 188 196 171 149 107 058 006	237 263 259 224 190 137 017	328 344 330 279 234 167 094 022	537 527 474 379 301 210 115 031	881 649 501 447 396 298 192 094	-1.233 -1.076 900 730 612 525 442 338	-1.029 969 892 820 764 720 685 634	•250 •350 •450 •550 •650 •750 •850 •926
Lower surface	.023 .072 .150 .250 .350 .450 .550 .650 .750 .860	630 535 427 301 2251 227 188 141 083 030	441 261 204 185 172 166 139 103 056 014	195 112 091 101 099 104 088 062 024 .006	.014 .001 004 032 040 053 026 .004	•171 •100 •076 •034 •018 ••001 •000 •010 •031 •043 •047	• 386 • 281 • 226 • 166 • 135 • 103 • 089 • 085 • 091 • 085 • 076	•493 •409 •346 •277 •234 •191 •165 •144 •133 •104 •083	.550 .499 .435 .360 .255 .218 .183 .149 .093	•591 •577 •521 •445 •389 •327 •280 •231 •183 •100 •031	.023 .072 .150 .250 .350 .450 .550 .650 .750 .860
	.000 .025	-•276 •300	•056 •203	M:	• 419 • 0.900;	q = 713 •390 •302	1b/sq ft •038 •1•008	403 -1.301	-•739 -1•372	886 985	•000 •025
Upper surface	.076 .150 .250 .350 .450 .550 .650 .750 .850	-156 -011 -072 -101 -096 -092 -066 -034 -008	.059089147171156142103055003	048170225251218193137074010	174252313350291255175092017	307331371432424392191092011	582 530 533 573 566 572 509 160 042	993728690687652623503271166	-1.375 -1.068 949 851 778 695 628 571 479	-1.002998948828776735709664	.076 .150 .250 .350 .450 .550 .650 .750 .850 .926
Lower surface	.023 .072 .150 .250 .350 .450 .550 .750 .860	676514413341310327297197109039013	406260221218216223193140077023000		002 013 021 052 065 080 070 046 009 -020	•153 •089 •063 •021 •001 -•021 -•019 -•005 •023 •041 •046	•376 •272 •219 •158 •125 •091 •078 •078 •078	•503 •410 •345 •274 •230 •185 •157 •135 •121 •086 •057	•573 •510 •451 •373 •322 •267 •229 •194 •162 •099 •047	.629 .602 .545 .469 .414 .354 .307 .264 .222 .144	.023 .072 .150 .250 .350 .450 .550 .650 .750 .860 .900

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

1.0 ATMOSPHERE FOR WING IN PRESENCE OF B)DY - Continued

(b) 25-percent-semispan station - Continued

	x/c	a = -4°	a = 20	$\alpha = 0^{\circ}$	a = 20	a = 40	a = 8°	ιι = 12 ⁰	a = 16°	$\alpha = 20^{\circ}$	x/c
	*/-	u = -4	WL	L	L	L	L	[" = 12	æ = 10	u = 20	x /c
		·		M =	= 0.940;	q = 743	Lb/sq It	r	,		
	•000 •025 •076	-•200 •302 •155	•091 •204 •061	• 326 • 085 •• 044	•419 -•074 -•161	•407 -•270 -•287	•114 -•884 -•531	291 -1.370 -1.177	631 -1.292 -1.280	-•885 -1•123 -1•118	.000 .025 .076
Upper surface	• 150 • 250 • 350 • 450 • 550 • 650 • 750 • 850 • 926	016 083 119 118 114 084 045	095 165 212 191 183 129 065 002	167 236 293 281 280 170 077 004	242 298 361 360 376 348 155 005	331 366 415 418 431 403 349 076	499 507 548 544 560 539 508 223	632 632 647 640 635 598 546 299	-1.233 973 769 701 670 632 585 474	-1.055 -1.008 947 885 823 773 739	• 150 • 250 • 350 • 450 • 550 • 650 • 750 • 850 • 926
Lower surface	.023 .072 .150 .250 .350 .450 .550 .650 .750 .860	671 476 389 333 312 333 333 338 302 093 014		208135122145155193179121053003016	012 023 033 068 087 114 102 071 024 .011	•147 •084 •057 •011 -•013 -•041 -•040 -•025 •005 •022 •025	.374 .269 .214 .151 .116 .076 .060 .052 .056 .038	.508 .414 .348 .277 .232 .184 .156 .133 .117 .075	.589 .524 .461 .386 .336 .281 .243 .210 .179 .119	.649 .620 .564 .491 .435 .377 .333 .290 .250 .177	.023 .072 .150 .250 .350 .450 .550 .650 .750 .860
				М -	= 0.980;	q = 771	lb/sq ft	-			
Upper surface	.000 .025 .076 .150 .250 .350 .450 .550 .650 .750 .850	158 -312 -172007082141144165156160139	•114 •221 •079 -•070 -•147 -•210 -•213 -•241 -•229 -•229 -•188	.346 .112 015 137 201 266 273 298 282 282 232	-438 -030 -122 -222 -270 -3328 -333 -357 -337 -334 -267	-432 -220 -244 -296 -336 -388 -393 -414 -390 -389 -319	•192 -•749 -•469 -•460 -•502 -•497 -•517 -•496 -•490 -•396	202 -1-254 -1-144 555 566 601 602 617 600 596 521			.000 .025 .076 .150 .250 .350 .450 .550 .650 .750 .850
Lower surface	023 072 150 250 350 450 550 650 750 860	622 425 334 302 292 311 320 327 303 293 278			.004 006 017 057 079 128 149 157 136 121	•153 •093 •065 •013 -•019 -•064 -•085 -•078 -•046 -•037 -•048	.384 .280 .225 .159 .119 .075 .043 .043 .020	•525 •429 •365 •292 •246 •196 •140 •124 •079 •038			.023 .072 .150 .250 .350 .450 .550 .650 .750 .860 .900

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(b) 25-percent-semispan station - Continued

	x/c	a 1.0	a = -2°	a = 0°	a = 20	T		0			T
	- K/ C	<u> </u>	<u> </u>		L	a = 40	a = 8°	$\alpha = 12^{\circ}$	$\alpha = 16^{\circ}$	$\alpha = 20^{\circ}$	x/c
_	ļ	T		м	= 1.030;	q = 803	lb/sq ft				
	•000 •025 •076 •150	070 .363 .223	•178 •267 •129	•387 •160 •037	•474 •028 ••067	•477 -•144 -•176	•275 -•622 -•374	092 -1.114 -1.020			•000 •025 •076 •150
Upper surface	• 250 • 350 • 450 • 550 • 650 • 750	-056 017 080 081 116 107	022 081 147 149 177 166	093 149 211 218 242	165 210 268 274 295	233 266 315 318 342	367 377 419 417 441	456 471 508 509 531			•250 •350 •450 •550
'n	• 850 • 926	-•113 -•118	-•167 -•161	-•226 -•226 -•211	276 277 248	-•321 -•317 -•279	-•421 -•417 -•352	-•514 -•511 -•462			•750 •850 •926
Lower surface	•023 •072 •150 •250 •350 •450 •550 •650 •750	526 342 253 228 217 234 244 251 233	373 155 140 145 159 185 199 209	148 048 055 073 089 126 145 159	.047 .036 .022 011 024 069 092	•193 •138 •112 •065 •037 ••010 ••032 ••040	•427 •326 •273 •207 •168 •123 •101 •090	•566 •473 •410 •340 •295 •246 •216 •193			.023 .072 .150 .250 .350 .450 .550
ol	• 860 • 900	-•224 -•227	-•189 -•179 -•172	140 136 132	-•082 -•075 -•069	-•026 -•014 -•017 q = 856 1	.094 .077 .051	•180 •140 •102	-		•750 •860 •900
surface	.000 .025 .076 .150 .250	•071 •356 •224 •064 •002	•297 •261 •135 -•008 -•061	•419 •178 •059 -•065 -•108	.495 .037 041 133 164	•499 ••096 ••137 ••193 ••216	•359 -•586 -•443 -•307 -•319	.080 863 803 368 381			.000 .025 .076 .150 .250
Upper su	• 450 • 550 • 650 • 750 • 850 • 926	060 064 086 067 077 085	120 129 149 123 131 133	164 171 193 165 171 170	216 220 243 213 217 212	264 265 286 259 260 249	351 345 367 348 342 316	408 412 442 422 413 388	·		• 450 • 550 • 650 • 750 • 850 • 926
Lower surface	• 023 • 072 • 150 • 250 • 350 • 450 • 550 • 650 • 750 • 860	471 250 178 177 164 180 189 185 177	377 115 091 085 094 123 137 141 130	126 036 028 021 048 078 093 098 086	•058 •062 •045 •043 •012 -•028 -•043 -•048 -•036 -•040	•198 •145 •115 •099 •066 •024 •010 •003 •009	.405 .314 .273 .219 .189 .148 .126 .113 .121	•572 •481 •426 •364 •326 •282 •259 •243 •240 •218			.023 .072 .150 .250 .350 .450 .550 .650 .750
	• 900	-•183	-•132	093	-•048	•001	•111	•190			•900

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF FODY - Continued

(b) 25-percent-semispan station - Concluded

ſ	x/c	$\alpha = -\pi_0$	a = -2°	a = 00	a = 20	or = 110	a = 8°	a = 12 ⁰	a = 16°	a. = 200	x/c
1	· · · · · ·	<u></u>		М	= 1.200;	q = 888	lb/sq f				
Upper surface	•000 •025 •076 •150 •250 •350 •450 •550 •650 •750 •850 •926	•168 •366 •235 •083 •027 -028 -038 -066 -055 -067	.284 .153 .016 030 083 099 117 104	047 080 136 153 165 147 154	.069 016 102 131 187 204 207 192 193	190 236 249 250 237 236	319 319 334	.171 723 670 322 352 380 377 406 387 382 362			.000 .025 .076 .150 .250 .350 .450 .550 .650 .750 .850
Lower surface	.023 .072 .150 .250 .350 .450 .550 .650 .750	575 180 145 145 164 181 181 153 134	086 078 087 082 115 135 137 139	027 005 028 033 064 086 086	.060 .062 .033 .015 012 036 037	•154 •130 •098 •071 •038 •022 •010 •014 •015	•311 •269 •220 •196 •157 •136 •116 •118	• 472 • 421 • 361 • 327 • 280 • 249 • 229 • 234 • 240			.023 .072 .150 .250 .350 .450 .550 .650 .750 .860

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(c) 40-percent-semispan station

	x/c	a = -40	a = -20	$\alpha = 0_0$	$\alpha = 5_0$	a = 40	a = 80	a = 12°	a = 16°	a = 20°	x/c
		!		М	= 0.800;	q = 627	lb/sq ft	 	L	L	
Upper surface	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850	•194 •354 •177 •099 •028 -•022 -•043 -•046 -•049 -•038 -•014 •024	.243 .270 .079 .011 048 088 104 098 070 035 .010	•316 •127 •044 •099 •139 •163 •151 •151 •100 •055 -•000	.239115213222237248240209176131075011	457 451 412 370 351 340 315 267 221 0162 093 021	-1.217 -1.196 -1.121 -1.042 769 528 428 343 273 119 035	-1.294 -1.272 -1.201 -1.129 -1.137 -1.033 960 824 714 579 455	979 992 -1.008 -1.003 950 901 858 811 767 723 684 632	881 873 865 837 792 777 756 735 698 675	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850
Lower surface	•024 •073 •150 •250 •350 •450 •550 •650 •750 •850 •900	787 764 801 532 211 147 109 071 023 .015	568 431 359 230 170 140 097 056 011 -023 -036	329 143 132 116 097 084 053 022 .014 .039 .048	020 014 025 038 032 029 009 .013 .041 .058	•185 •109 •059 •034 •027 •020 •032 •043 •065 •075	•384 •282 •208 •160 •137 •115 •110 •109 •114 •108	.472 .398 .319 .259 .259 .185 .164 .145 .131 .100	•505 •466 •392 •327 •282 •234 •200 •163 •127 •054 •001	•524 •526 •463 •398 •398 •245 •195 •143 •052	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850
Upper surface	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850	.214 .335 .157 .076 .005 -0045 -0068 -0071 -069 -053 -022 .019	•261 •251 •053 -•017 -•077 -•121 -•138 -•130 -•117 -•087 -•045 •008	**************************************	- 0.900; - 256 - 101 230 259 290 - 328 - 301 - 272 - 216 - 152 - 082 - 009	q = 713 -0229 -0420 -0414 -0387 -0414 -0433 -0478 -0432 -0223 -0159 -0089 -0011	-1.425 -1.441	-1.214 -1.229 -1.190 -1.163 -1.120 -1.055 932 827 737 655 583 485	808 819 845 870 876 865 831 795 764 735 707 672	904 944 872 850 831 811 7794 773 754 732 717 699	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850
Lower surface	• 024 • 073 • 150 • 250 • 350 • 450 • 550 • 650 • 750 • 850 • 900	815 730 792 657 377 262 163 099 038 .010 .028	602 431 376 309 234 192 130 074 020 021 036	392 176 173 159 133 115 076 037 .006 .038 .050	055 042 054 058 053 026 002 036 059 066	.150 .084 .033 .008 .006 .001 .018 .037 .063 .078	.368 .265 .191 .143 .121 .101 .098 .101 .109 .107 .107	.467 .384 .306 .246 .210 .174 .154 .133 .119 .080	•524 •474 •399 •334 •288 •240 •208 •173 •137 •070 •020	•553 •546 •484 •417 •369 •318 •274 •230 •182 •103 •044	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF B)DY - Continued

(c) 40-percent-semispan station - Continued

ſ	x/c	a = -40	a = -2°	a = 00	a = 50	α = 4°	a = 8°	L = 12 ⁰	a = 16°	a = 200	x/c
Ì	L			М =	0.940;	q = 743 1	b/sq ft				
Upper surface	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850	.224 .326 .143 .060 013 065 092 091 087 063 024 .025	. 264 . 241 . 040 - 037 - 107 - 150 - 176 - 167 - 139 - 096 - 046 . 010	.307 .121 070 143 197 266 282 254 184 120 062 .002	-280 074 215 246 302 335 384 395 402 232 048 016	372	-1.089 585		-1.071 -1.039 990 924 857 796 796 796 7808 789 762 718	870 884 903 927 906 8880 863 845 819 774 777 753	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850
Lower surface	024 073 150 250 350 450 650 750 850	790 669 629 631 452 388 354 299 099 .013	601 438 362 345 307 317 247 006 -032 -045	453 199 206 220 180 157 092 044 005 040 053	088 069 088 108 093 083 048 011 .030 .059	•126 •063 •016 •015 •016 •0020 •020 •021 •051 •070 •075	•356 •251 •176 •125 •101 •076 •071 •069 •074 •063 •053	•469 •382 •303 •242 •207 •169 •148 •127 •112 •076 •049	•536 •484 •410 •345 •299 •254 •222 •187 •152 •092	•572 •562 •500 •437 •399 •298 •255 •212 •136 •083	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850 .900
Upper surface	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850	•247 •327 •141 •053 -•032 -•088 -•125 -•151 -•164 -•179 -•149	• 285 • 252 • 050 • 030 • • 104 • • 176 • • 209 • • 231 • • 248 • • 262 • • 231 • • 052	**************************************	- 0.980; - 315 - 031 - 186 - 217 - 268 - 312 - 356 - 370 - 387 - 389 - 375 - 169	q = 771 .007 306 367 342 365 394 421 444 455 455 437 266	-1.122 -1.127	-1.145 -1.198 -1.073 998 948 918 879 834 779 720 677 498			.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850
Lower surface	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850	779614523491431398368342299227138	585 408 327 309 282 300 289 267 228 157 069	468 160 180 212 204 231 220 201 164 084 018	088 063 092 137 130 145 131 085 006 018	•114 •054 ••002 ••049 ••058 ••070 ••055 ••036 ••010 ••001	.357 .252 .174 .120 .094 .065 .056 .047 .044 .016	•483 •394 •314 •252 •216 •177 •156 •134 •116 •073 •044			.024 .073 .150 .250 .350 .450 .550 .650 .750 .850

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(c) 40-percent-semispan station - Continued

	x/c	a = -1t0	a = -2°	$\alpha = 0^{\circ}$	a = 50	a = 40	a = 8°	$\alpha = 12^{\circ}$	a = 16°	a = 20°	x/c
				М :	= 1.030;	q = 803	l	<u> </u>	<u> </u>		<u></u>
Upper surface	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850	.307 .378 .198 .113 .028 043 073 105 117 140 127	.333 .300 .105 .029 036 109 146 167 187 198 190	.373 .186 .008 061 129 176 224 258 258 256 185	.374 .037 124 157 208 250 287 308 327 327 315 236	•105 •220 •284 •253 •293 •322 •348 •368 •384 •381 •367 •283	968 989 823 457 470 462 480 508 505 487 374	-1.156 -1.200 -1.109975793704647624621614602471			.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850
Lower surface	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850	689 515 406 360 337 324 302 279 241 205 166	530 345 263 243 216 238 229 209 172 137 103	440 114 124 148 146 175 167 150 115 081 055	043 012 037 079 075 105 093 079 048 022 008	•157 •105 •051 •004 •006 •031 •021 •017 •012 •022 •019	• 396 • 294 • 218 • 165 • 140 • 112 • 105 • 099 • 075 • 051	•523 •436 •357 •295 •260 •223 •201 •180 •162 •119 •086			• 024 • 073 • 150 • 250 • 350 • 450 • 550 • 650 • 750 • 850 • 900
Upper surface	.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850	.347 .372 .193 .125 .049 010 055 078 106 112 085	.375 .292 .099 .037 020 076 120 143 160 172 168 149	M = .420 .207 .025 -034089135172193213213217212192	1.125; q -406 -079084120164208235247275271268242	= 856 lb •221 •138 •221 •138 •221 •199 •247 •277 •296 •309 •328 •328 •321 •286	/sq ft 697758643376401413419411426432414356				.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850
Lower surface	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850	730 435 329 276 265 258 244 229 151 134	539 248 193 185 160 175 162 154 088 069	407 097 093 097 100 125 114 107 080 044 030	046 .014 006 022 035 070 057 047 020 .008 .019	•156 •123 •083 •034 •020 ••013 •001 •009 •037 •056 •062	•396 •300 •223 •163 •156 •135 •137 •135 •143 •130	•539 •453 •379 •325 •298 •269 •256 •244 •237 •205 •178			.024 .073 .150 .250 .350 .450 .550 .650 .750 .850

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(c) 40-percent-semispan station - Concluded

	x/c	a = -4º	oc = -2 ⁰	$\alpha = 0_0$	or ≃ 5 ₀	or = 110	$\alpha = 80$	a = 12 ⁰	a = 16°	a = 200	x/c
				М =	1.200;	q = 888 1	lb/sq ft				
Upper surface	•000 •020 •073 •150 •250 •350 •440 •550 •650 •750 •850 •923	.404 .407 .229 .152 .076 .018 019 052 076 095 095	.421 .338 .151 .079 .005 045 016 136 145 144	.463 .254 .068 002 058 102 136 158 191 195 193	.451 .108 031 079 129 195 216 241 247 238 214	•267 -•080 -•185 -•161 -•206 -•233 -•261 -•268 -•291 -•300 -•285	521 597 525 448 369 380 376 381 378 378	830 817 767 733 708 666 522 462 448 452 452 451			.000 .020 .073 .150 .250 .350 .440 .550 .650 .750 .850
Lower surface	.024 .073 .150 .250 .350 .450 .550 .650 .750 .850	670 433 277 220 228 224 229 202 165 136 126	570 242 154 154 152 165 160 117 080 072	352 040 061 071 074 096 109 110 073 030	023 .039 .025 .006 012 045 051 053 034 .014	•164 •149 •100 •070 •046 •008 •006 •002 •012 •057 •069	•417 •326 •247 •183 •167 •123 •119 •109 •122 •167 •169	•551 •458 •377 •315 •288 •258 •248 •259 •264 •244			.024 .073 .150 .250 .350 .450 .550 .650 .750 .850

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(d) 60-percent-semispan station

	<u> </u>	T	1 -	Τ -	T				·		
	x/c	$\alpha = -h_c$	$\alpha = -2^{\circ}$	$\alpha = 0_0$	a = 50	a = 40	$\alpha = 8^{\circ}$	$\alpha = 12^{\circ}$	$\alpha = 16^{\circ}$	a = 20°	x/c
,					M = 0.800); q = 62	7 lb/sq :	ſt			
	•000	•130 •386							852	804	.000
	075	249		+166	134				707		
	1 4 150	156		•027 -•041	170	1 '	965	796	~+689		
1 8	• 250	091	,	075	192	-0376	934	786	679		
Silvface	• 350	042			185	321	911	761	665	672	
1 5	450	1 .072	-•024	-•103	-•197	~•301	864	-•723	649	664	
		009	-•060	_ 117			ŀ	1		1	• 450
۵	• 650	026	066	117	180	244	-•678	649	618	648	4
Upper	750	023	053	114	165	-•215	518	613	600	637	
	850	003	027	087	125	157	345	- ∙583	~•582	624	
1	900	012	009	- •050	076	093	~•195	- ∗546	564	609	
	• 925	1	-•009	027	-•042	-•056	- •135	~∙535	-4554	602	900
	1 112					1	ľ	1			• 925
1	.040		[,,]								1
	091	641	-•512 -•466	225 156	-004	•188	• 359	•434	• 456	•478	•040
1	• 150	602	455	120	001	•126	• 282	• 367	405	449	091
e e	• 250	609	462	089	•012	•111	•242	•319	♦358	•402	•150
ĕ	• 360	593	273	069	•003	•078	•192	•259	•292	●338	•250
surface	450	525	- 130	047	•001	•062	•157	•211	• 236	•279	• 360
	• 550	390	060	022	•011 •024	•060	•140	•179	•193	•230	• 450
Lower	●650	218	017	•008	045	•063	•126	•144	•145	•175	•550
\$	●800	•001	032	• 046	071	•073	•122	•117	a 104	•126	•650
13	●874	•055	044	053	071	088	•112	•052	•019	•029	•800
1	l	•		• • • • •	. •071	•082	•095	-•013	054	- •052	●874
]		1	·			i .			l i
		Li									i i
ı				M =	= 0.900;	q = 713	lb/sq ft				
	•000 •025	•149	• 357	• 443	•356	212	-1.316	-1.010	-•881	805	•000
1	•075	• 374 • 234	289	• 151	~•161		-1.559	990	746	724	025
ļ.	• 150	141	133	005	-•212	445	-1 • 396	763	715	~.708	075
ce	•250	•076	045	066	243	475	-1.322	755	705	705	•150
fa	• 350	028	-•007 -•046	-•103	-•239	455	954	741	~- 695	696	•250
surface	• 450	•020		130	246	437	768	722	682	689	• 350
	•550	023	077	100			- 1		I		•450
ğ	€650	036	_	139	213	256	558	674	~.659	675	•550
Upper	750	032		-•135 -•102	194	-+241	243	647	644	668	•650
~	●850	008		060	142 081	168	153	616	-•625	658	•750
	• 900	007		030	044	093	104	580	606	647	850
	• 925		••14	•030		049	072	564	-∙593	640	•900
	1	I		1	- 1		1]	i		•925
	•040	737	551	370							į.
l l	•091	737 701	-496	-•270 -•195	021	•158 •103	•333 •256	•415	457	• 492	•040
	• 150	-+678			008	092	218	• 348 • 301	404	459	•091
ę,	• 250	-•673			-014	062	173	• 301	♦357	•418	•150
surface	• 360	662		_	-0012	051	143	• 242 • 195	295	• 355	• 250
3	• 450	595	-•180	-062	•002	053	130	161	241	•300	• 360
	• 550	-•453	093 -	-•033	018	.061	119	126	199	253	• 450
a l	• 650	-•251	037	•001	•042	.076	120	098	•153 •115	199	• 550
Lower	•800	•022	•025	•047	•072	093	116	038	039	154	•650
니	• 874	•080	•040	•055	075	089		. 1		•065 •006	800
	ľ	- 1	1	1	j	1	,	77.7		• • • •	•874
1	1	l			1			- 1	ŀ	J	J
			1								- E

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(d) 60-percent-semispan station - (ontinued

ſ	x/c	a = -40	$x = -2^{\circ}$	$\alpha = 0^{\circ}$	or = 5 ₀	a = 40	a = 80	14 = 12 ⁰	a = 16°	α = 20 ⁰	x/c
				М =	0.940;	q = 743	lb/sq ft	- 		 1	
Upper surface	.000 .025 .075 .150 .250 .350 .450 .550 .650 .750 .850 .900	-169 -351 -211 -120 -055 -012 030 041 033 009 -006	.342 .261 .104 .019 031 064 085 088 069 036 013	.411 .129 027 103 137 161 149 144 107 062 032	-360 -139 -220 -278 -307 -350 -354 -155 -112 -069 -037		-1.386 -1.246 -1.193 -1.079 712 656 675 525 175 113	-1.077 -1.038 856 863 857 819 752 705 655 613 587	969 865 751 742 732 721 700 686 672 643	890 823 768 758 750 740 722 711 691 684	.000 .025 .075 .150 .250 .350 .450 .550 .650 .750 .850 .900
Lower surface	.040 .091 .150 .250 .360 .450 .550 .650 .800	761 729 717 720 708 628 474 308 093 021	599 548 548 487 380 236 135 063 .012	334 246 195 142 101 069 036 000 048 057	077 065 043 042 032 013 .010 .039 .075 .079	•121 •072 •065 •038 •030 •036 •047 •068 •094	.304 .227 .191 .143 .112 .098 .087 .088 .086	.405 .335 .289 .230 .185 .154 .121 .096 .041	• 461 • 409 • 365 • 304 • 251 • 212 • 167 • 128 • 060 • 001	.475 .433 .373 .319 .275 .222 .178 .095	.091 .150 .250 .360 .450 .550 .650 .800
Upper surface	.000 .025 .075 .150 .250 .350 .450 .550 .650 .750 .850 .900	• 207 • 319 • 171 • 070 • 004 • • 052 • • 128 • • 143 • • 056 • • 036 • • 021	.344 .236 .076 019 083 154 210 247 222 003 .020	.413 .128 026 111 171 240 294 332 352 139 014	- 0.900; - 371 - 084 - 182 - 247 - 286 - 337 - 386 - 409 - 447 - 350 - 118	075 -0498 -362 -0407 -0399 -0429 -0476 -0493 -0520 -0504 -0289	818 -1-214 -1-094 -1-048 969 635 616 643 653 644	-1.290 -1.382 -1.328 -1.280 -1.231 -1.209 -1.086 947 882 740 653			.000 .025 .075 .150 .250 .350 .450 .550 .650 .750 .900
Lower surface	1 4550	708 674 667 685 718 712 634 473 207	-•419 -•355 -•270 -•063	262 250 267 246 221 151 . 036		020 001	•205 •165 •114 •080 •058 •038 •025 •001	.400 .324 .276 .216 .170 .137 .102 .075 .028 012			.040 .091 .150 .250 .360 .450 .550 .650 .800

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(d) 60-percent-semispan station - Continued

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF FODY - Continued

(d) 60-percent-semispan station - Concluded

ſ	x/c	or = -11 ₀	a = -2°	$a = 0_0$	α = 2 ⁰	α ≈ 4°	a = 80	a = 12°	$\alpha = 16^{\circ} \alpha =$	20° x/c
ą.	.000 .025 .075	•330 •390 •252 •156	•088	• 454 • 227 • 087 • 009	- 1.200; - 489 - 074 - 029 - 093 - 132	q = 888 •282 •167 •184 -•258 -•223	1b/sq ft216659597588562	702 832 783 764		.000 .025 .075 .150 .250
Upper surface	• 250 • 350 • 450 • 550 • 650 • 750 • 850 • 900 • 925	.077 .024 030 051 084 095	039 097 111 152 160	159 179 208 227	170 228 244 274 291	254 283 318 339 354	544 391 414 432 431	628		• 350 • 450 • 550 • 650 • 750 • 850 • 900 • 925
Lower surface	.040 .091 .150 .250 .360 .450 .550 .650 .800		0309 209 201 1186 174 7145 9098	127 121 139 121 107 077 029	034 016 027 072 058 043	076 085 044 -005 003 0019 0052	•250 •225 •169 •132 •155 •157 •162	.395 .360 .320 .299 .281 .265 .255		.040 .091 .150 .250 .360 .450 .550 .650 .800

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(e) 80-percent-semispan station

	x/c	a = -4°	$\alpha = -2^{\circ}$	a = 0°	a = 50	a = 40	$\alpha = 8^{\circ}$	a = 12°	a = 16°	a = 20°	x/c
_					M = 0.80	0; q = 62	 27 lb/sq			T	1/
Upper surface		.403 .298 .217 .138 .077 .032 001 034 055 094	• 351 • 220 • 147 • 074 • 0022 • • 014 • • 036 • • 053 • • 047 • • 037	• 252 • 109 • 050 • 012 • 055 • 081 • 095 • 099 • 084 • 064	.011 080 117 134 158 170 164 157 127	671 348 306 290 281 268 241 217 166 115	578 578 548 517 485 448 415 384 349 324	493 487 480 467 451 435 423 412 399 391	505 499 493 485 478 468 461 455 444 438	561 558 5547 547 543 537 535 529 521 512	.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850
Lower surface	.078 .150 .250 .360 .450 .560 .610 .700	460 451 441 439 453 454 452	471 480 480 498 419 365 242 085	521 411 133 043 009 .002 .035 .060	049 030 012 008 .024 .030 .058 .077	•128 •090 •076 •061 •063 •063 •081 •089	•277 •217 •172 •135 •085 •073 •064 •035	•323 •259 •201 •150 •072 •053 •034 -•006	• 352 • 291 • 231 • 176 • 081 • 060 • 033 • • 013	•375 •325 •266 •207 •103 •078 •044	.078 .150 .250 .360 .450 .560 .610 .700 .800
Upper surface	•022 •076 •150 •250 •370 •450 •550 •600 •650 •750 •850 •900		•008 -•027 -•050 -•067 -•061	•242 •100 •039 •027 -074 -103 -114	020 109 144 164 194 206 197	391 361 344 342 328 286 245 178	1.419 1.182 1.097 959 839 737 646		-•523 -•521 -•514	609 603 598 599 590 585 583 579 573	.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850
Lower surface	•610 •700	496 487 488 521 523 520	-•484 - -•492 - -•506 -	-•419 -•237	051 034 017 011 .023 .030 .061	•132 •093 •079 •063 •068 •069 •089 •099	•272 •215 •175 •145 •112 •105 •106 •091	.306 .244 .190 .140 .063 .045 .027	•344 •284 •228 •173 •085 •064 •040 •006	•331 •273 •218 •119 •094 •066	078 150 250 360 450 560 610 700 800

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF PODY - Continued

(e) 80-percent-semispan station - Continued

L	x/c	α = -4°	a = -20	$\alpha = 0_0$	$\alpha = 2^{\circ}$	a = 40	α = 8°	$\alpha = 12^{\circ}$	$\alpha = 16^{\circ}$	a = 20°	x/c
				М	= 0.940;	q = 743	lb/sq ft				
٦	•022	• 388	4346	• 234	080	677	-1.342 -1.193	6 ⁰ 1	-•625 -•611	663 654	•022 •076
	•076	•292	•214	.094	174 222	452 472	-1.136	574	602	648	.150
- 1	• 150	•209	•124	•029 ••034	196	450	-1.082	564	595	642	•250
9	• 250	•140 •078	●065 ●008	081	195	487	-1.044	555	589	636	• 370
Sur I ace	● 370 ● 450	•036	030	111	222	532	967	545	583	630	• 450
3	• 550	005	- 053	122	216	552	615	540	583	626	•550
	•600	••••	• • • • • • • • • • • • • • • • • • • •				·			1	•600
Ž.	▲650	023	072	129	206	234	513	533	579	622	•650
opper	• 750	036	066	111	162	~.092	484	528	576	615	• 750
1	850	065	051	085	-•113	056	470	~•52 3	-+571	~.608	•850 •900
	• 900										1900
l	•078	537	514	462	057	.098	•230	• 294	• 343	•387	•078
١	150	514	510	408	037	•067	•176	•233	•288	• 345	• 150
	•250	495	512	278	017	•062	•141	•180	•232	•289 •235	•250 •360
2	• 360	486	~•525	113	011	•053	•112	•132	•181	0230	• 450
suriace	a 450					.067	.083	•062	•097	•142	•560
3	• 560	523	489 462	021 006	•025 •032	070	077	045	076	122	.610
	•610	545 551	390	034	.063	092	081	•031	056	093	•700
LOWEL	• 700 • 800	509	236	064	085	•106	.069	002	•016	.044	•800
7											
		1		M	= 0.980;	q = 771	lb/sq ft				
	•022	• 341	• 260	•171 •023	•013 -•124	-•324 -•379	-1.182 -1.065	964 838			.022 .076
	•076	•229 •143	•123	057	205	396	-1.013	835			•150
.	• 150 • 250	084	033	124	250	373	970	822			•250
surface	370	•032	108	200	299	418	946	800			•370
ũ	450	005	133	261	352	472	947	772	1	Į.	• 450 • 550
Sur	• 550	029	046	310	381	516	955	751			.600
H	●600					540	940	724			650
Upper	•650	050	058	043	429 450	1		696			•750
Þ,	•750 •850	055 075	053 039	003	131	563		672			•850
	•900		,								•900
						006	•159	• 288			.078
	•078	682	810 789	578 501			096	•228		1	150
	• 150 • 250	602	1	396	1		.066	•179	1]	• 250
بو	• 360	574	-	279			•035	•136			• 360
BC	450										• 450
surface	• 560	552			1				1		•610
	•610	570				_			1		700
fer	• 700	619								1	.800
Lower	•800	603	•154		,						
				1			1			1	

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(e) 80-percent-semispan station - Continued

	x/c	α = -4°	a = -2°	$\alpha = 0^{\circ}$	a = 2º	a = 40	$\alpha = 8^{\circ}$	$\alpha = 12^{\circ}$	a = 16°	a = 20°	x/c
				М	= 1.030;	q = 803	lb/sq ft				<u> </u>
Upper surface	.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850	• 358 • 244 • 153 • 081 • 004 • • 052 • • 093 • • 127 • • 148 • • 123	•302 •168 •077 •014 ••061 ••158 ••205 ••239 ••252	• 224 • 076 • 077 • 007 • 139 • 192 • 237 • 278 • 311 • 336	.086 061 142 179 238 291 330 359 396 425	202 281 317 299 3387 430 466 478 511	-1.028 916 875 836 819 824 831 675 622	-1.238 -1.165 -1.110 -1.067 -1.050 -1.042 -1.041 -1.012 833 710			.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850
Lower surface	.078 .150 .250 .360 .450 .560 .610 .700 .800	725 718 715 711 664 645 606 554	725 713 705 670 535 475 345 167	632 556 477 354 198 155 076 023	196 204 157 144 071 055 014 011	014 038 027 026 010 007 017 029	•199 •142 •110 •081 •050 •042 •050 •044	.300 .243 .194 .155 .099 .086 .082			.078 .150 .250 .360 .450 .560 .610 .700 .800
Upper surface	• 022 • 076 • 150 • 250 • 370 • 450 • 550 • 600 • 650 • 750 • 850 • 900	.379 .264 .164 .118 .050 011 049 091 118 134	•316 •185 •083 •038 -•024 -•074 -•117 -•160 -•182 -•209	M = .260 .116 .013024080136175214246269	1.125; q 128 -012 -087 -111 -162 -212 -254 -284 -312 -341	= 856 11 088 198 260 223 258 302 332 367 388 411	772 678 663 663 628 642 653 668 666	980 913 874 884 884 8840 8840 8840 8802			.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850
Lower surface	• 078 • 150 • 250 • 360 • 450 • 560 • 610 • 700 • 800	653 643 643 627 570 551 508 456	-•652 -•506 -•411 -•318 -•277 -•208	581 448 338 265 189 159 086 010	160 130	006 007 009 008 .025 .036 .079 .102	•234 •186 •163 •147 •123 •119 •131 •132	•356 •304 •261 •229 •183 •173 •172 •157			•078 •150 •250 •360 •450 •560 •610 •700 •800

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(e) 80-percent-semispan station - Concluded

	x/c	a = -40	a = -20	a = 00	a = 2º	or = 110	a. = 80	a = 12 ⁰	a = 160	a = 20°	x/c
				M =	1.200;	q = 888 1	b/sq ft				
Upper surface	.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850	.383 .273 .187 .137 .076 .020 021 060 087 114	•337 •213 •123 •075 •018 -•036 -•073 -•115 -•150	• 281 • 145 • 058 • 013 • 044 • • 096 • • 133 • • 169 • • 200 • • 229	•176 •037 •047 •071 •120 •164 •202 •238 •260 •285	011 127 236 181 212 254 284 314 338 356	573 504 511 500 504 524 546 562 572 581	837 760 733 710 702 701 713 714 720 722			.022 .076 .150 .250 .370 .450 .550 .600 .650 .750 .850 .900
Lower surface	•078 •150 •250 •360 •450 •560 •610 •700 •800	758 704 667 637 477 401 347 299	219 194	116	295 122 106 117 087 072 032 048	.002 003 008 016 .003 .012 .053 .116	• 225 • 182 • 155 • 137 • 136 • 143 • 171 • 182	• 365 • 315 • 279 • 258 • 222 • 215 • 219 • 210			.078 .150 .250 .360 .450 .560 .610 .700 .800

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(f) 95-percent-semispan station

	x/c	α ≈ -jt	$\alpha = -2^{\circ}$	1 = 0		1	$\alpha = 8^{\circ}$	a = 12°	a = 16°	$\alpha = 20^{\circ}$	x/c
Upper surface		•31 •20 •11 •043 ••026 ••078 ••109 ••122	•184 •084 •024 ••029 ••065 ••083	•210	•054 -•039	-•229 -•239 -•246	7 lb/sq f437420401369332302272250	335 332 331 327 324 318		433 432 432 436 439 443 445	•07 •15 •25 •35 •466 •55 •666 •750
TOWEL SULIBCE	•100 •200 •250 •350 •450 •550 •600 •690	226 214 208 197 187 175 170 160	-+317 294 284 268 251 239 236 238	433 344 321 293 242 160 108 027	133 090 066 039 015 .012 .020 .038	.057 .033 .027 .019 .016 .023 .026	018 027	•214 •138 •107 •052 ••000 ••036 ••052 ••078	•245 •169 •132 •069 •003 ••039 ••059 ••097	•277 •200 •164 •094 •024 -•034 -•060	•100 •200 •250 •350 •450 •550 •600
	•073 •150 •250 •350 •460 •550 •660 •750 •800	•326 •208 •120 •044 -•034 -•100 -•139 -•152	044 087 102	•212 •116 •010 ••046 ••100 ••126 ••111	.033 064 122 156 179 174	266 292 290 242 216 171	518 507 491 468 437 408 379	•400 •401 •403 •405	429 432 434 437	-•483 -•480 -•479 -•482 -•484 -•486	073 150 250 350 460 550 660 750 800
	200 250 350 450 550 600	234 229 218 208 197 192	-•309 -•298 -•282 -•266 -•256 -•253	• 343 • 324 • 298 • 255 • 180 • 131	•022	.042 .035 .022 .011 .020	•132 •107 •056 •003 •029 •041	036 031 - 077 -	•069 •060 •088	207 174 108 029 035 064	100 200 250 350 450 550

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(f) 95-percent-semispan station - Continued

٢	x/c	a = -40	a = -2°	$\alpha = 0^{\circ}$	a = 50	a = 4°	$\alpha = 8^{\circ}$	ı = 12 ⁰	α = 16°	$\alpha = 20^{\circ}$	x/c
T				M =	0.940;	q = 743]	·			524	077
Upper surface	• 073 • 150 • 250 • 350 • 460 • 550 • 660 • 750 • 800	• 340 • 235 • 137 • 059 • • 024 • • 096 • • 144 • • 164	• 295 • 179 • 088 • 021 - • 048 - • 095 - • 107 - • 103	.211 .119 .009 054 120 147 122 077	.013 076 138 178 240 189 140 088	429 458 464 291 156 178 156	555 535 507 480 454 435 418 407	465 466 466 470 471 474 475	480 476 473 473 473 475 479	536 533 529 527 526 527 527 525	.073 .150 .250 .350 .460 .550 .660 .750
Lower surface	•100 •200 •250 •350 •450 •550 •600 •690	-•297 -•283 -•278 -•267 -•254 -•243 -•237 -•225	337 315 306 291 278 272 270 273	462 350 329 306 266 193 141 043	137 091 066 046 020 014 024	.080 .048 .044 .026 .009 .023 .030	• 162 • 097 • 076 • 025 • 040 • • 079 • • 093 • • 122	•196 •125 •097 •040 ••032 ••086 ••107 ••153	• 247 • 179 • 149 • 087 • 013 - • 048 - • 075 - • 134	•290 •227 •197 •135 •060 ••007 ••037	•100 •200 •250 •350 •450 •550 •600 •690
		<u> </u>	<u> </u>	М	= 0.980;	q = 771	lb/sq ft				
Upper surface	•073 •150 •250 •350 •460 •550 •660 •750 •800	• 323 • 229 • 127 • 058 • 021 • • 090 • • 139 • • 151	.099 .035 039 090	084	116 182 249 310 392 218	-•387 -•386 -•427 -•463 -•518	951 927 909 906 921	-1.332 -1.242 -1.192 -1.155 -1.079 937 813 761			.073 .150 .250 .350 .460 .550 .660 .750 .800
Lower surface	•100 •200 •250 •350 •450 •550 •600 •690	37; 35; 34; 32; 32; 32; 32	1284 2273 6267 1264 1281 9281		2173 083 053 7033 -023 8 -031	052 040 040 086 072	024 014 -014 -071 -125 -142	.109 .089 .043 025 086			•100 •200 •250 •350 •450 •550 •600

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Continued

(f) 95-percent-semispan station - Continued

	x/c	$\alpha = -\mu^{\alpha}$	$\alpha = -2^{\circ}$		$\alpha = 2^{\circ}$	_ <u></u>	a = 80	$\alpha = 12^{\circ}$	a = 16°	a = 20°	x/c
_		T		М	= 1.030;	q = 803	lb/sq ft				
Upper surface	.073 .150 .250 .350 .460 .550 .660 .750	.299 .199 .101 .031 054 142 218 202	•155 •046 ••021	•171 •089 -•013 -•074 -•152 -•250 -•359 -•391	.039 030 121 188 236 330 422 446		891 803 784 774 772 789 779 780	-1.171 -1.075 -1.036 -1.015 -1.005 -1.002 994 979			•073 •150 •250 •350 •460 •550 •660 •750 •800
Lower surface	•100 •200 •250 •350 •450 •550 •600 •690	518 491 482 466 452 437 428	543 497 479 454 429 414 406	-•867 -•697 -•579 -•413 -•315 -•220 -•185 -•155	279 308 267 205 156 092 062 054	079 136 118 089 086 090 081	•092 •044 •041 •025 •022 •076 ••096	•200 •142 •126 •089 •030 ••026 •-052 ••102			•100 •200 •250 •350 •450 •550 •600
			<u></u>	M =	1.125; q	ı = 856 1t	o/sq ft	[· · · ·
Upper surface	•073 •150 •250 •350 •460 •550 •660 •750 •800	• 327 • 249 • 154 • 091 • 021 -• 068 -• 161 -• 176	• 264 • 176 • 092 • 030 • • 023 • • 110 • • 212 • • 246	• 199 • 125 • 036 • 030 • 072 • 152 • • 250 • • 289	•102 •031 •057 ••114 ••155 ••229 ••317 ••352	049 143 177 220 256 314 380 394	652 572 572 576 576 593 595 597	911 837 808 792 791 794 783			•073 •150 •250 •350 •460 •550 •660 •750 •800
TOWER SULFREE	•100 •200 •250 •350 •450 •550 •600 •690	624 588 567 533 499 484 475	-•751 -•721 -•659 -•531	-•536 -•372 -•303	574 288 258 245 233 129 056 014	070 120 115 092 045 010 011 027	•160 •102 •104 •104 •081 •039 •018	• 269 • 218 • 205 • 183 • 133 • 088 • 062 • 015			200 250 250 350 450 600 690

TABLE IV.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR WING IN PRESENCE OF BODY - Concluded

(f) 95-percent-semispan station - (oncluded

1	x/c	a = -4°	a = -2°	ar = 0 ₀	a = 20	a = 40	a = 80	1 = 120	a = 16°	α = 20 ⁰	x/c
		<u> </u>		М	= 1.200;	q = 888	lb/sq ft				
Upper surface	•073 •150 •250 •350 •460 •550 •660 •750 •800	.334 .261 .166 .105 .057 018 113	•281 •206 •114 •054 •010 -•060 -•153 -•192	•224 •140 •062 •003 ••043 ••110 ••199 ••242	•140 •056 -•019 -•072 -•112 -•171 -•253 -•291	007 132 123 170 207 256 323 345	482 439 442 449 465 486 495 498	776 707 686 671 670 675 668 658			.073 .150 .250 .350 .460 .550 .660 .750
Lover surface	1 .000	752 727 729 693 637 660 652	745 717 706 680 653 640 623 493	650 634 623 569 399 248 228 125	505 341 175 204 220 173 010	070 110 102 091 084 022 .012 .061	•180 •116 •121 •124 •110 •100 •080 •054	.300 .238 .236 .223 .186 .156 .131			•100 •200 •250 •350 •450 •550 •690

TABLE V.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING

(a) Station A

	T	7			т	,	r		· ·	
x/1	$\alpha = -4^{\circ}$	$\alpha = -5_0$	$\alpha = 0_0$	$\alpha = 2^{\circ}$	$\alpha = \mu^{O}$	$\alpha = 8^{\circ}$	$\alpha = 12^{\circ}$	a = 16°	$a = 50_0$	x/l
			М	0.800	; q = 310	lb/sq f	t			•
•055						<u> </u>	T	1	Γ	.055
• 166	•041	•018	•007	006	023	035	028	029	028	166
• 277	•017	•004	007	-•028	036	036	036	033	053	•277
• 367	.107	•069	.045	•007	002	045	-•092	138	153	.367
• 387	•097	•052	•022	004	037	108	186	263	284	•387
• 415	•074	•022	019	060	102	201	312	-•395 T	429	•415
• 443	•045	007	056	095	151	~•260	~•389	426	~.489	. 443
•498	•019	041	-•088	136	191	301	396	408	433	.498
•553	010	061	104	145	191	-•285	309	404	416	.553
•581	0.0									•581
•609	012	044	065	125	160	207	238	340	-∙385	•609
• 636 • 664	~•022	053	080	-•097	128	155	210	301	-•386	•636
4 69 2	022 011	050	065	076	-•097	114	172	270	408	.664
.719	.004	028 007	036	048	055	-•065	114	199	369	•692
•774	010	-0007	015	016	024	023	060	136	305	•719
• B30	004	008	003	•007	•003	•003	016	~•072	199	•774
•871	•007	•000		•001	•003	•007	004	036	109	• 83 0
• 954	015	•020	•006 •027	.010	•011	•018	•013	007	046	•871
• 724	.019	•020	•021	•037	•041	•037	•034	•024	•028	• 954
				0.000						
	г		M	= 0.900;	q = 358	lb/sq ft	;			
• 055	! !						ŀ	- 1		• 055
• 1 6 6	•039	•015	• 003	014	024	030	019	014	009	. 166
• 277	•015	• 000	014	034	041	031	013	001	008	• 277
• 367	120	•081	• 064	•011	•028	•006	022	052	072	• 367
• 387	116	•071	•042	•015	004	059	114	179	220	.387
•415	•083	.031	006	047	094	157	234	334	388	•415
• 443	•052	007	052	099	-•151	236	320	405	412	• 443
•498	•008	056	105	155	-•204	306	414	488	445	• 498
• 553	-•034	091	156	-•231	~•287	-•377	483	321	486	•553
•581	000						1	ļ		•581
•609 •636	030	-•098	139	184	231	438	483	415	450	• 609
	045	081	111	143	173	451	418	479	441	• 636
•664 •692	036 018	063	084	100	100	243	202	506	442	. 664
719		036	044	052	047	035	100	460	452	• 692
774	.000 800	011	016	020	017	.006	080	169	349	•719
830	012	001	- 002	•004	•008	•027	050	131	306	•774
871	001	013 001	006	003	•004	•013	022	077	202	.830
954	•013	•020	.005	•008	.013	•023	•007	035	118	.871
- ,,,,	• 01.5	•020	• • • • •	•033	•041	•040	•030	•015	016	• 954

TABLE V.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(a) Station A - Continued

x/l	a = -40	a = -50	ar = 00	a = 20	a = 40	a = 8°	α = 12 ⁰	a = 16°	$\alpha = 20^{\circ}$	x/l
			М =	= 0.940;	q = 368 :	lb/sq ft				
•055								201	001	.055
• 166	•040	•014	•001	011	020	035	021	004	•001	•166 •277
•277	.012	004	016	036	039	029	305 - 309	•018 -•010	043	.367
.367	•130	•095	.071	•023	•043	.026 035	386	137	196	.387
• 387	•126	•085	•057	•039	.013	136	201	- 289	371	415
•415	•092	•040	001	024	071 134	214	287	367	461	• 443
• 443	•057	002	050	088	199	292	389	454	325	.498
•498	•005	055	107	145 227	272	362	447	490	446	•553
• 553	048	118	187	-0221	-4212	• > 0 -				.581
•581	043	133	152	281	331	421	492	410	515	•609
•609 •636	055	102	142	284	350	447	509	405	544	• 636
• 664	048	070	085	179	347	474	483	451	517	•664
• 692	019	032	034	027	082	387	404	482	493	•692
•719	005	005	009	•002	•005	030	055	 385	372	•719
•774	.009	.005	.008	.013	•026	.034	039	242	318	•774
830	011	011	008	•002	•014	•029	032	096	253	•830 •871
.871	.000	•002	.005	•011	•021	•031	006	050	152 038	•954
. 954	•019	•024	•033	•039	•049	•051	•033	.015	-,036	• 737
			М	= 0.980;	q = 385	lb/sq ft				
	1									.055
.055	0.44	.023	.004	008	020	024	.000	.017	•031	.166
. 166	•044	003	015	030	033	017	.020	.050	•055	•277
• 277	153	124	104	039	.082	.068	.057	.044	•013	• 367
• 367 • 387	154	1113	.087	100	.048	.010	031	079	134	•387
• 415	115	.067	.030	.003	037	090	154	229	308	•415
.443	.077	021	021	063	103	169	234	312	396	• 443
498	.022	036	080	126	174	251	337	405	481	• 498
•553	068	121	164	206	245	322	400	453	529	•553
•581		'	1	Į	1				- 525	•581
609	064	123	228	263	311	388	457	510	535 535	•636
.636	111	181	241	288	334	416	489	544	338	.664
.664	143	205	257	311	362	440	514	578 589	389	•692
.692	133	201	257	308	354	450	537	351	499	719
•719	028	053	088	133	206	343	-,466	108	202	774
.774	003	•024	• 040	.034	.010	073	066	161	266	830
.830	011	•009	•028	•037	•040	.014	030	165	254	.871
.871	•003	.019	•032	•039	-047	.091	054	039	096	•954
• 954	.030	•041	•054	•064	•076	1 .071				

TABLE V.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(a) Station A - Continued

x/l	$\alpha = -4^{\circ}$	a = -20	$a = 0_0$	$\alpha = 5_0$	a = 40	a = 80	$\alpha = 12^{\circ}$	$\alpha = 16^{\circ}$	$\alpha = 20^{\circ}$	x/1
			М :	= 1.030;	q = 400 .	lb/sq ft	<u> </u>	<u> </u>	<u> </u>	L
∙055				Ţ				<u> </u>		• 055
• 166	•083	•069	•053	•041	•026	•012	•026	•048	•073	• 166
• 277	•024	•025	•010	011	016	021	•061	•102	•112	• 277
. 367	•197	•159	•129	•014	•108	•135	•122	•113	090	. 367
• 387 • 415	• 204	•167	•139	•173	•115	•079	•038	006	048	• 387
• 443	•171	123	•081	•065	•021	013	082	153	218	•415
498	.076	•075 •024	.028 034	007	047	092	155	-•236	309	• 443
553	003	056	103	073 143	118 182	179	263	-• 323	393	• 498
581	1-1003	036	103	143	102	244	321	376	439	• 553
609	034	074	115	216	243	-•311	385	428	~.485	•581
. 636	066	123	-• 185	225	270	338	411	467	524	•609 •636
664	091	142	206	252	296	364	440	507	549	.664
692	104	149	209	250	294	381	466	532	587	692
719	084	108	154	185	- 207	309	440	528	589	•719
774	048	039	026	029	052	094	117	017	•007	.774
830	070	055	048	045	059	069	- 066	067	186	.830
871	057	042	042	041	049	048	032	067	140	.871
954	143	124	085	065	053	033	056	154	205	954
	<u> </u>	<u> </u>	L	L			L			
			М	= 1.125;	q = 421	lb/sq ft				
055			М	= 1.125;	q = 421	lb/sq ft				•055
166	•063	•042	M •031	= 1.125; •013	q = 421	1b/sq ft	026	027	-•037	.055 .166
166 277	.017	•009	•031 •000	.013 027	002 032	014 031	034	039	037 088	
166 277 367	•017 -•007	•009 -•015	.031 .000 006	.013 027 012	002 032 033	014 031 012	034 .010	039	088 .188	•166 •277 •367
166 277 367 387	•017 -•007 •123	•009 -•015 •087	•031 •000 -•006 •055	.013 027 012 .003	002 032 033	014 031 012 .036	034 .010 .031	039 .124 .057	088 .188 .076	•166 •277 •367 •387
166 277 367 387 415	.017 007 .123	.009 015 .087 .124	.031 .000 006 .055	.013 027 012 .003	002 032 033 .044 .038	014 031 012 .036 022	034 .010 .031 058	039 .124 .057 075	088 .188 .076 088	•166 •277 •367 •387 •415
166 277 367 387 415	•017 -•007 •123 •165 •135	.009 015 .087 .124	.031 .000 006 .055 .103	.013 027 012 .003 .072	002 032 033 .044 .038 015	014 031 012 .036 022 074	034 .010 .031 058 118	039 .124 .057 075 148	088 .188 .076 088 183	•166 •277 •367 •387
166 277 367 387 415 443	.017 007 .123 .165 .135	.009 015 .087 .124 .089	.031 .000 006 .055 .103 .055	.013 027 012 .003 .072 .032 046	002 032 033 .044 .038 015	014 031 012 .036 022 074 149	034 .010 .031 058 118 208	039 .124 .057 075 148 241	088 .188 .076 088 183 276	•166 •277 •367 •387 •415 •443 •498
166 277 367 387 415 443 498	•017 -•007 •123 •165 •135	.009 015 .087 .124	.031 .000 006 .055 .103	.013 027 012 .003 .072	002 032 033 .044 .038 015	014 031 012 .036 022 074	034 .010 .031 058 118 208	039 .124 .057 075 148 241	088 .188 .076 088 183	•166 •277 •367 •387 •415 •443 •498 •553
166 277 367 387 415 443 498 553 581	.017 007 .123 .165 .135 .088 .029	.009 015 .087 .124 .089 .035 021	.031 .000 006 .055 .103 .055 007	.013 027 012 .003 .072 .032 046 102	002 032 033 .004 .038 015 089 140	014 031 012 .036 022 074 149 205	034 .010 .031 058 118 208 250	039 .124 .057 075 148 241 278	088 .188 .076 088 183 276 318	•166 •277 •367 •387 •415 •443 •498 •553 •581
166 277 367 387 415 443 498 553 581 609	.017 007 .123 .165 .135 .088 .029	.009 015 .087 .124 .089 .035 021	.031 .000 006 .055 .103 .055 007 061	.013 027 012 .003 .072 .032 046 102	002 032 033 .044 .038 015 089 140	014 031 012 .036 022 074 149 205	034 .010 .031 058 118 208 250	039 .124 .057 075 148 241 278	088 -188 -076 088 183 276 318	•166 •277 •367 •387 •415 •443 •498 •553 •581 •609
166 277 367 387 415 443 498 553 581 609 636	.017 007 .123 .165 .135 .088 .029 018 038	.009 015 .087 .124 .089 .035 021	.031 .000 006 .055 .103 .055 007 061	.013 027 012 .003 .072 .032 046 102	002 032 033 .044 .038 015 089 140	014 031 012 .036 022 074 149 205	034 .010 .031 058 118 208 250	039 .124 .057 075 148 241 278 342 378	088 .188 .076 088 183 276 318	•166 •277 •367 •387 •415 •443 •498 •553 •581 •609 •636
166 277 367 387 415 443 498 553 581 609 636	.017 007 .123 .165 .135 .088 .029 018 038 056	.009 015 .087 .124 .089 .035 021 052 095 106	.031 .000 006 .055 .103 .055 007 061	.013 027 012 .003 .072 .032 046 102 159 180 196	002 032 033 .044 .038 015 089 140 198 215 236	014 031 012 .036 022 074 149 205 260 281 300	034 .010 .031 058 118 208 250 309 327 361	039 .124 .057 075 148 241 278 342 378 398	088 .188 .076 088 183 276 318	.166 .277 .367 .387 .415 .443 .498 .553 .581 .609 .636
166 277 367 387 415 443 498 553 581 609 636 664 692	.017 007 .123 .165 .135 .088 .029 018 038 056 067	.009 015 .087 .124 .089 .035 021 052 095 106 115	.031 .000 006 .055 .103 .055 007 061 082 136 149 158	.013 027 012 .003 .072 .032 046 102 159 180 196 201	002 032 033 .044 .038 015 089 140 198 215 2215 236	014 031 012 .036 022 074 149 205 260 281 300 315	034 .010 .031 058 118 208 250 309 327 361 377	039 .124 .057 075 148 241 278 342 378 398 414	088 .188 .076 088 183 276 318 353 376 391 422	.166 .277 .367 .387 .415 .443 .498 .553 .581 .609 .636 .664
166 277 367 387 415 443 498 553 5609 6664 692 719	-017 -007 -123 -165 -135 -088 -029 -018 -038 -056 -067 -066	.009 015 .087 .124 .089 .035 021 052 095 106 115 108	.031 .000 006 .055 .103 .055 007 061 082 136 149	.013 027 012 .003 .072 .032 046 102 159 180 196 201 179	002 032 033 .044 .038 015 089 140 198 215 236 226	014 031 012 .036 022 074 149 260 281 300 315 285	034 .010 .031 058 118 208 250 309 327 361 377	039 .124 .057 075 148 241 278 342 378 398 414 417	088 .188 .076 088 183 276 318 353 376 391 422 424	.166 .277 .367 .387 .415 .443 .498 .553 .581 .609 .636 .664
166 277 367 387 415 443 498 553 609 636 664 692 719 774	-017 -007 -123 -165 -135 -088 -029 -018 -038 -056 -067 -066 -039	.009 015 .087 .124 .089 .035 021 052 095 106 108 108	.031 .000 -006 .055 .103 .055 007 061 082 136 149 158 140	.013 027 012 .003 .072 .032 046 102 159 180 196 201 179 054	002 032 033 .044 .038 015 089 140 198 215 2245 2245 2245	014 031 012 036 022 074 149 205 260 281 300 285 068	034 .010 .031 058 118 208 250 309 327 361 377 369 083	039 .124 .057 075 148 241 278 378 378 398 414 417	088 .188 .076 088 183 276 318 353 376 391 422 424 .112	.166 .277 .367 .387 .415 .443 .498 .553 .581 .609 .636 .664 .692 .719
166 277 367 387 415 443 498 553 581 609 636 664 6719 774 830	-017 -007 -123 -165 -135 -088 -029 -018 -038 -056 -067 -066 -039 -050	.009 015 .087 .124 .089 .035 021 052 095 106 115 108 047 050	.031 .000 -006 .055 .103 .055 007 061 082 136 149 158 140 050	.013 027 012 .003 .072 .032 046 102 159 180 196 201 179 054 042	002 032 033 .044 .038 015 089 140 198 215 236 245 245 066 043	014 031 012 .036 022 074 149 205 260 281 300 315 285 068 034	034 .010 .031 058 118 250 309 327 361 361 369 083 029	039 .124 .057 075 148 241 278 378 378 398 414 417 .056 .056	088 .188 .076 088 183 276 318 353 376 391 422 424 .112	.166 .277 .367 .387 .413 .498 .553 .581 .609 .636 .664 .719 .774
166 277 367 387 415 443 498 553 581 609 636 664 692 719 774	-017 -007 -123 -165 -135 -088 -029 -018 -038 -056 -067 -066 -039	.009 015 .087 .124 .089 .035 021 052 095 106 108 108	.031 .000 -006 .055 .103 .055 007 061 082 136 149 158 140	.013 027 012 .003 .072 .032 046 102 159 180 196 201 179 054	002 032 033 .044 .038 015 089 140 198 215 2245 2245 2245	014 031 012 036 022 074 149 205 260 281 300 285 068	034 .010 .031 058 118 208 250 309 327 361 377 369 083 029	039 .124 .057 075 148 241 278 342 378 398 414 417 .056 .056	088 .188 .076 088 183 276 318 353 376 391 422 424 .112	.166 .277 .367 .387 .415 .443 .553 .553 .609 .636 .664 .692 .719

TABLE V.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(a) Station A - Concluded

x/l	a = -40	a = -20	$a = 0_0$	$\alpha = 2^0$	a = 40	$\alpha = 80$	$\alpha = 12^{\circ}$	a = 16°	α = 20°	x/l
			М	= 1.200;	q = 436	lb/sq ft	; 	T	,	•095
055 166 277 387 387 443 4498 553 581 609 6664 692 719 774 830 871	.075 .033 .018 .036 .171 .160 .118 .057 .006 023 035 054 062 048 039	.057 .024 .006 .030 .137 .117 .067 .014 027 056 075 099 057 041 034 082	.042 .001 .010 .023 .059 .102 .028 026 059 107 125 139 140 066 044 027	.027002 .008 .019 .019 .074014061129139168175069038016	.014 003 011 .025 .048 .025 055 099 150 173 201 203 029 068 029 008	003 013 010 034 003 049 119 164 224 274 274 274 070 025 000 031	003 012 008 -028 042 099 173 217 271 293 311 336 342 076 014 010 033	008044053 -067071133218260307339355383397074026000050	025 088 051 .056 063 161 246 284 340 376 373 406 412 070 .010 .026	. 166 . 277 . 367 . 413 . 498 . 553 . 581 . 609 . 636 . 6692 . 719 . 774 . 830 . 871

TABLE V.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(b) Station B

x/l	α = -4°	a = -2º	a = 00	a = 2°	a = 4°	α = 8°	a = 12º	a = 16°	a = 20°	x/l
			Í	M = 0.800	; q = 310	1 b/ sq f	t			
1 •166 •277 •367 •387 •498 •553 •609 •664 •719 •774 •830 •871	.030 .003 .102 .161 .068 .009 045 037 024 001 .011 007			006027026021111155187074013007000	020 034 011 031 173 240 173 092 019 008 001	052 059 085 147 309 349 359 244 122 020 006 006	074 080 167 273 466 332 198 076 019 003 002			•166 •277 •367 •387 •498 •553 •609 •664 •719 •774 •830 •871
		^ ·	•	M = 0.900); q = 35	8 lb/sq f	t		L	
.166 .277 .367 .387 .443 .498 .553 .609 .664 .719 .774 .830	-029 -001 -122 -176 -069 -002 -070 -060 -042 -004 -008 -013 -020	.012 -013 .091 .129 .005 -063 -128 -017 -063 -013 .002 -013	.002 -019 .068 .086 -055 -120 -198 -151 -080 -012 .005 -004	013 034 -044 108 176 282 201 013 005 010	022 036 -025 -004 1228 342 326 095 012 004 003	051 047 026 090 271 347 446 481 001 013 010	067 055 082 184 386 470 561 528 248 100 059 030	096 051 122 285 502 539 467 566 266 139 072	105 036 168 365 548 648 648 648 645 267 180 120	.166 .277 .367 .387 .498 .553 .609 .664 .719 .774 .830 .871
				M = 0.940); q = 36	8 1b/sq	rt			-
.166 .277 .367 .387 .448 .553 .609 .664 .719 .774 .830	.029 004 .131 .188 .073 086 076 050 .002 .011 014	.009 017 .102 .142 .010 063 162 133 069 006 .007 011	.000 024 .079 .102 045 117 236 222 081 009 009	008 033 .060 .066 098 164 280 303 155 .005 .017 .000	018 037 -043 -022 148 220 324 353 334 -006 -013 -006	051 049 005 060 248 331 426 470 494 062 .022 .026 .008	061 047 050 147 349 437 550 114 066 045 019	092 035 078 235 461 537 591 440 530 344 238 105 053	098 015 140 327 569 512 632 672 680 399 282 282 165	.166 .277 .367 .387 .498 .553 .609 .664 .719 .830 .871
				M = 0.98	D; q = 38	5 1b/sq	ft			
• 166 • 277 • 367 • 343 • 498 • 553 • 609 • 664 • 719 • 774 • 830 • 871	*038 *002 *158 *216 *092 *017 -*104 -*150 -*043 *001 -*016	.018 013 .133 .170 .032 044 159 187 217 051 .023 .010 .007	.007 021 .110 .133 015 088 206 241 277 071 .035 .026 .017	005 031 .087 .102 062 145 248 286 323 103 .028 .033	016 034 -075 -060 110 192 296 337 372 166 -001 -032 -033	038 037 -038 015 202 283 380 426 465 258 085 004 012	047 022 003 094 292 379 474 520 567 304 095 090	066 006 023 171 475 558 607 653 267 141 165 201	064 .021 076 268 503 585 663 615 577 316 243 244 258	•166 •277 •367 •367 •443 •498 •553 •609 •719 •774 •830 •871

TABLE V.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(b) Station B - Concluded

*** *** **** **** **** **** **** **** ****	x/l	a = -40	a = -2°	a = 0°	a = 2°	a = 1,0	a = 8°	a = 12°	a = 16°	a = 20°	x/l
*** *** *** *** *** *** *** *** *** **				м	= 1.030;	q = 400	lb/sq f	t			
**************************************											•166 •277
**************************************											.367
.443									093	175	.387
**************************************				•035							. 443
**************************************											• 553
*** **********************************											609
**************************************											.664
**************************************											.719
**************************************					035	056				4	•774
**M = 1.125; q = 421 lb/sq ft **M = 1.125; q = 421 lb/sq ft **M = 1.125; q = 421 lb/sq ft **M = 1.125; q = 421 lb/sq ft **M = 0.002	.830	075									.830
*** 166	.871	064	054	060	057	066	102	-, 105	154	194	• 0 / 1
*** 166											
***				м	= 1.125;	q = 421	lb/sq f	t			
***			-027	-022	- 019	•002	= .029	067	-4119	147	• 166
***							046			- 115	.277
***								009			• 367
*** *** *** *** *** *** *** *** *** **				• 150	.110						• 387
## 1.200; q = #36 lb/sq ft 166		.141	•091								443
*** **********************************	• 498										•498 •553
***											609
**************************************											.664
**************************************											•719
**M = 1.200; q = 436 lb/sq ft **M = 1.200; q = 436 lb/sq ft							080	109	•025		4774
**M = 1.200; q = 436 lb/sq ft **M = 1.200; q = 436 lb/sq ft						048	051				.830
*** **********************************		042	042	037	036	038	066	054	.005	036	.871
***				м	= 1.200	; q = 436	lb/sq f	<u> </u>		<u> </u>	<u> </u>
367 -043 -040 -019 -011 -0049 -036 -055 -062 -3 387 -200 -169 -050 -029 -094 -024 -032 -088 -098 -3 443 -163 -116 -084 -035 -003 -086 -163 -225 -281 -4 498 -101 -059 -026 -015 -004 -144 -216 -287 -353 -4 553 -023 -024 -056 -099 -137 -213 -284 -345 -431 -5 669 -018 -055 -094 -128 -171 -227 -323 -395 -485 -6 664 -057 -103 -148 -188 -220 -293 -370 -448 -546 -6 719 -071 -088 -111 -122 -135 -160 -185 -238 -251 -7 774 -042 -046 -057 -056 -059 -048 -049 -055 -066 -066 -888	. 166										•166 •277
.387											367
**************************************											-387
498 101 .059 .026 015 064 144 216 287 353 .4 .553 .023 024 056 099 137 213 224 345 431 .5 .609 018 056 094 128 171 224 224 335 385 .6 .664 057 103 148 188 220 293 370 448 546 .6 .719 071 088 111 122 135 185 238 251 .7 .774 042 046 057 053 071 069 147 148 188 .7 .830 062 057 056 050 048 049 055 066 046 .8											.443
**************************************											. 498
*609 -*018 -*056 -*094 -*128 -*171 -*247 -*323 -*395 -*485 *6 *664 -*57 -*103 -*148 -*128 -*220 -*273 -*370 -*448 -*556 *6 *719 -*071 -*088 -*111 -*122 -*135 -*160 -*185 -*251 -*251 *7 *774 -*042 -*046 -*057 -*063 -*071 -*096 -*147 -*148 -*188 -*188 *830 -*062 -*057 -*056 -*050 -*048 -*049 -*055 -*066 -*046 *8							213				.553
**************************************			056	094							•609
**************************************											•664 •719
*830062057056050048049055066046 *8								1 7 7 . 1			.774
1830 -082 -033 -033 -034 -034 -034 -034								1		1 .	830
											.871
	. 011	-•03/	-,032	••••	••••	""		'''			
		1				1					

TABLE V. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(c) Station C

x/l	a = _4°	a = -50	1 .0	a = 20	1 ,0	a = 8°		1.00	10	1 /.
	a = -4	u = -2*	$\alpha = 0^{\circ}$	d = 2	a = 4°	u = 0	a = 12°	a = 16°	$\alpha = 20^{\circ}$	x/l
<u> </u>	1			1 = 0.800	; q = 310	0 1b/sq f	't		,	
.055 .166 .277 .353 .367 .692	007 026 -225 -032	004 020	001 013 .322 .036	.000 016	006 025	047 065	110 127 -140 015	191 206 040 052	296 305 179 226	.055 .166 .277 .353
•719 •774 •830 •871 •954	.009 006 .008 .020	.031 .004 008 .003 .017 .033	.009 004 .004 .022 .036	.042 .013 .001 .012 .025 .039	.047 .017 .000 .018 .031	.043 .022 .007 .025 .040	010 016 .014 .032	071 065 018 .021	248 192 103 028 .030	.692 .719 .774 .830 .871
				M = 0.90	0; q = 35	58 1b / sq	ft			
•055 •166 •277 •353 •367 •692	008 027 .261 .032	005 024 .305 .031	002 020 .333 .037	006 027 .334 .039	008 027 .342 .046	~•045 -•058 •318 •025	100 107 -223 059	181 172 -078 153	274 258 090 216	.055 .166 .277 .353 .367
•719 •774 •830 •871 •954	.012 006 .001 .014 .035	.009 006 .002 .017 .036	.010 006 .003 .019	.012 001 .006 .022 .038	.025 .007 .016 .029	.040 .025 .032 .045 .038	042 063 018 .019 .039	171 172 097 022 .040	298 318 240 116 .003	•719 •774 •830 •871 •954
•055			м	= 0.940	; q = 368	lb/sq f	t			•055
•166 •277 •353 •367	005 025	005 026	001 022	002 026	004 030	049 059	095 099	-•168 -•151	263 242 035	•166 •277 •353 •367
•692 •719 •774 •830 •871 •954	.031 .022 .000 .000 .014	.035 .015 002 .002 .016	.040 .016 .004 .003 .020	.043 .030 .011 .012 .027 .043	.015 .032 .021 .025 .038	079 022 .021 .034 .049	145 077 078 045 .001 .037	168 196 265 174 066 -037	201 270 330 306 190 010	.692 .719 .774 .830 .871
		1.0	м :	= 0.980;	q = 385	lb/sq ft				
•055 •166 •277 •353 •367	•001 -•022	•005 -•021	.008 018	.004 021	001 030	036 048	083 078	146 126	233 202	•055 •166 •277 •353 •367
•692 •719 •774 •830 •871 •954	094 057 009 .007 .023	095 045 .016 .025 .035	093 039 .027 .032 .042	087 051 .016 .033 .051	109 101 011 .024 .053	152 169 094 014 034 070	214 178 119 138 071 -032	207 088 153 215 173 063	195 152 269 331 263 132	•692 •719 •774 •830 •871 •954

TABLE V.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(c) Station C - Concluded

x/l	a = -4º	a. = -2°	α = 0°	a = 20	α = 4°	a ≈ 8°	a 120	a = 16°	or = 500	x/l
_			м	= 1.030;	q = 400	lb/sq ft				
.055						221	25.6	109	192	.055
. 166	•045	.049	• 050	.050	•042	-006 045	056 045	077	147	277
• 277	013	•003	•009	•005	006	-,045		011	•••	. 353
• 353		240	. 363	.361	•372	.397	.339	.224	.0B4	. 367
. 367	073	063	074	067	072	089	163	182	138	. 692
•692 •719	090	072	080	076	084	120	¬-158	158	072	•719
774	078	049	035	046	066	108	143	073	089	•774
830	057	047	041	040	058	094	-,129	147	249	.830
.871	033	029	028	025	038	053	060	138 209	199 254	•871 •954
954	093	085	074	071	084	088	130	209	-0254	•754
						,				
			1	M = 1.125	5; q = 42	l lb/sq:	rt 		1	
.055							094	187	291	.055
. 166	•009	.020	•027	.026	.016	024	127	226	340	.277
.277	013	011	.004	004	015	051	-0127	-0220	-6340	. 353
• 353			201	•283	.299	.246	.114	035	.089	.367
• 367	• 226	• 273	• 286 -• 045	047	051	060	- 109	081	.012	.692
• 692	052 065	051	061	065	067	074	089	074	.030	.719
•719 •774	062	058	050	054	060	075	095	.008	.040	•774
830	044	042	034	035	044	062	089	053	097	•830
871	013	017	008	008	006	015	017	004	055	.871
954	030	038	039	049	051	058	•005	065	109	• 954
				1 = 1.200); q = 43	6 lb/sq 1	L		l	
.055	027	•037	.038	.037	•028	013	073	172	-,276	.05
•166 •277	•027 •003		.003	.003	004		-104	205	347	•27
•353	ا '''' ا				• • •		1			• 35
.367	.222	•277	•027	.039	.316	.246	•132	064	307	• 36
692	047	041	042	039	035	047	-085	084	092	• 69
•719	065	059	059	056	053	059	.063	083 108	078 137	77
.774	062		055	053	057	072	- 092 - 092		172	.83
. 830	045	040		042 .006					083	.87
.871	004		-002 070	072			114		137	. 95
4 954	076	071	010	072	•••	• • • • •				
	[Į.					1

TABLE V.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(d) Station D

	a = -40	a = -2º	$a = 0_0$	a = 20	a = 40	$\alpha = 8^{\circ}$	a = 120	a = 16°	$\alpha = 20^{\circ}$	x/
			1	M = 0.800	; q = 310	O lb/sq f	`t		1.0	
. 166	.003	.005	.004	•020	•031	.058	.067	.068	.048	.16
.277		* *	ŀ	1	1	1175	•••		1.040	27
• 367	010	•023	.054	•081	•103	4145	.178	•220	•240	.36
• 387	108	055	003	•045	•086	•163	•233	•296	• 346	• 38
443	214	145	080	026	•032	•136	•243	•335	+417	. 44
• 498 • 553	192	134	077	026	•026	•127	•218	•308	•382	• 49
609	148	093	045 062	026	-044	•127	•200	• 265	•331	• 55
664	069	052	032	009	•006	•070	•123 •064	•163 •074	•211 •074	•66
719	020	018	011	.004	•013	.026	.014	02B	124	.71
• 774	•001	€004	.008	.020	.022	.030	.015	031	145	• 77
830	•015	•011	•011	•014	•019	•021	•009	020	113	.83
•871	014	016	019	-•012	013	018	035	053	131	•87
	<u> </u>		<u></u>			<u> </u>				
	 			M = 0.900); q = 35	8 1b/sq	ft		T	,
• 166 • 277	•002	.004	•002	•014	•026	•063	•074	•079	•071	•166 •27
367	•025	.049	.074	•093	•113	•158	.206	•249	-285	-36
387	084	037	•011	•051	•095	.180	-261	•329	•3B8	.38
443	~- 226	157	095	039	+024	•145	•254	•359	· 455	.44
498	218	156	101	044	•013	125	•226	.324	+419	• 498
553	244	155	084	034	•021	•116	•201	•283	• 366	•55
609	195 076	133 061	087 042	050 022	011	•067 •039	•120	•183	•252	609
719	021	016	004	•000	•004 •016	.030	•052 -•024	•078 -•098	•123	• 664
774	.001	•008	.013	•015	•025	•040	034	138	126 242	•719
830	.006	•008	•011	•012	•018	026	024	102	250	.830
871	018	021	020	022	017	014	055	116	245	.871
				M = 0.940); q = 36	8 1b/sq i	ſt			
								-		
	•006	•005	.004	•015	•028	•061	•077	•090	•082	
277	1									.271
277 367	.048	•064	.088	•110	•129	•167	•216	•268	•302	•271 •347
277 367 387	.048 055	•064 -•020	.088 .023	•110 •066	•129 •107	•167 •190	•216 •272	•268 •350	•302 •412	• 271 • 367 • 387
277 367 387 443	.048	•064	.088 .023 096	•110 •066 -•040	•129 •107 •027	•167 •190 •146	•216 •272 •261	•268 •350 •374	•302 •412 •475	•271 •347 •387 •443
277 367 387 443 498	.048 055 209	-064 020 158	.088 .023	•110 •066	•129 •107	•167 •190	•216 •272	•268 •350	•302 •412	•277 •347 •387 •443 •498
277 367 387 443 498 553	.048 055 209 217 233 311	.064 020 158 159 169	.088 .023 096 101 131	•110 •066 -•040 -•046 -•055 -•062	•129 •107 •027 •011 •009	•167 •190 •146 •125	•216 •272 •261 •229	•268 •350 •374 •338	•302 •412 •475 •441	.271 .347 .387 .443 .498
277 367 387 443 498 553 609	.048 055 209 217 233 311 136	.064 020 158 159 169 241	.088 .023 096 101 131 110	•110 •066 -•040 -•046 -•055 -•062 -•025	•129 •107 •027 •011 •009 -•021 -•007	•167 •190 •146 •125 •106 •048 •010	•216 •272 •261 •229 •203 •123 •046	•268 •350 •374 •338 •300 •201	.302 .412 .475 .441 .390 .279	.271 .361 .381 .443 .498 .553
277 367 387 443 498 553 609 664 719	.048 055 209 217 233 311 136 002	.064 020 158 159 169 241 053	.088 .023 096 101 131 110 040	•110 •066 -•040 -•046 -•055 -•062 -•025 •013	•129 •107 •027 •011 •009 -•021 -•007 •014	•167 •190 •146 •125 •106 •048 •010	•216 •272 •261 •229 •203 •123 •046	.268 .350 .374 .338 .300 .201 .093	.302 .412 .475 .441 .390 .279 .155	.277 .367 .387 .443 .498 .553 .609
277 367 387 443 498 553 609 664 719	.048 055 209 217 233 311 136 002	.064 020 158 159 169 241 053 008	.088 .023 096 101 131 110 040 005	•110 •066 -•040 -•046 -•055 -•062 -•025 •013 •026	•129 •107 •027 •011 •009 -•021 -•007 •014 •037	•167 •190 •146 •125 •106 •048 •010 ••017 •030	.216 .272 .261 .229 .203 .123 .046 054	.268 .350 .374 .338 .300 .201 .093 093	.302 .412 .475 .441 .390 .279 .155 095	.271 .361 .381 .443 .498 .553 .609 .664 .719
277 367 387 443 498 553 609 664 719 774 830	.048 055 209 217 233 311 136 002 .011 .005	.064 020 158 159 169 241 053 008 .011	.088 .023 096 101 131 110 040 005 .014	•110 •066 -•040 -•046 -•055 -•062 -•025 •013 •026 •016	•129 •107 •027 •011 •009 ••021 ••007 •014 •037 •024	•167 •190 •146 •125 •106 •048 •010 -•017 •030 •024	•216 •272 •261 •229 •203 •123 •046 ••054 ••060 ••054	.268 .350 .374 .338 .300 .201 .093 093 206 191	.302 .412 .475 .441 .390 .279 .155 095 245	.271 .361 .443 .498 .553 .609 .664 .719
277 367 387 443 498 553 609 664 719 774 830	.048 055 209 217 233 311 136 002	.064 020 158 159 169 241 053 008	.088 .023 096 101 131 110 040 005	•110 •066 -•040 -•046 -•055 -•062 -•025 •013 •026	•129 •107 •027 •011 •009 -•021 -•007 •014 •037	•167 •190 •146 •125 •106 •048 •010 ••017 •030	.216 .272 .261 .229 .203 .123 .046 054	.268 .350 .374 .338 .300 .201 .093 093	.302 .412 .475 .441 .390 .279 .155 095	.271 .361 .443 .498 .553 .609 .664 .719
277 367 387 443 498 553 609 664 719 774 830	.048 055 209 217 233 311 136 002 .011 .005	.064 020 158 159 169 241 053 008 .011	.088 .023 096 101 131 110 040 005 .014 .010	•110 •066 -•040 -•046 -•055 -•062 -•025 •013 •026 •016	•129 •107 •027 •011 •009 •021 •007 •014 •037 •024 ••014	•167 •190 •146 •125 •106 •048 •010 •017 •030 •024 -•020	.216 .272 .261 .229 .203 .046 054 060 054	.268 .350 .374 .338 .300 .201 .093 093 206 191	.302 .412 .475 .441 .390 .279 .155 095 245	.271 .367 .443 .498 .553 .609 .664 .719 .774
166 277 367 387 443 498 5553 6664 719 774 830 871	.048 055 209 217 233 311 136 002 .011 .005	.064 020 158 159 169 241 053 008 .011	.088 .023 096 101 131 110 040 005 .014 .010	•110 •066 -•040 -•046 -•055 -•062 -•025 •013 •026 •016 -•017	•129 •107 •027 •011 •009 •021 •007 •014 •037 •024 ••014	•167 •190 •146 •125 •106 •048 •010 •017 •030 •024 -•020	.216 .272 .261 .229 .203 .046 054 060 054	.268 .350 .374 .338 .300 .201 .093 093 206 191	.302 .412 .475 .441 .390 .279 .155 095 245	.166 .271 .367 .387 .498 .553 .609 .664 .719 .871
277 367 387 443 498 553 669 719 774 830 871	.048 055 209 217 233 311 136 002 .011 .005 018	.064 020 158 159 169 241 053 008 .011	.088 .023 096 101 131 110 040 005 .014 .010 023	•110 •066 •040 •055 •0062 •025 •013 •026 •016 •017	.129 .107 .027 .011 .009 -021 -007 .014 .037 .024 014	.167 .190 .146 .125 .106 .048 .010 -017 .030 .024 020	•216 •272 •261 •229 •203 •123 •046 •054 ••054 ••078	.268 .350 .374 .338 .300 .201 .093 093 206 1179	.302 .412 .475 .441 .390 .279 .155 095 245 308 427	.271 .367 .387 .492 .553 .609 .664 .719 .830 .871
277 387 387 443 498 553 609 664 719 774 830 871	.048 055 209 217 233 311 136 002 011 .005 018	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 005 .014 .010 023	.110 .066 040 046 055 062 025 .013 .026 .016 017	•129 •107 •027 •011 •009 •021 •0037 •014 •037 •024 ••014 •033 •024 ••014	.167 .190 .146 .125 .106 .048 .010 -017 .030 .024 020	.216 .272 .261 .229 .203 .123 .046 054 054 078	.268 .350 .374 .338 .300 .201 .093 206 191 179	.302 .412 .475 .441 .390 .279 .1095 -095 -245 -308 -427	.271 .367 .387 .498 .553 .609 .664 .719 .774 .830 .871
277 367 387 443 498 553 669 664 719 774 830 871	.048 055 209 217 233 311 136 002 011 .005 018	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 040 005 .014 .010 023	*110 *066 *-040 *-046 *-055 *-062 *-025 *013 *-026 *-017 *-017	•129 •107 •027 •011 •009 •021 •007 •014 •037 •024 •-014 ; q = 385	.167 .190 .146 .125 .106 .048 .010 017 .030 .024 020	.216 .272 .261 .229 .203 .123 .046 054 078	•268 •350 •374 •338 •300 •201 •093 •206 •191 •179	.302 .412 .475 .441 .390 .279 .155 245 308 427	.271 .367 .367 .498 .552 .609 .664 .719 .774 .830 .871
277 387 387 443 498 553 609 664 719 774 830 871	.048 055 209 217 233 311 136 002 .011 .005 018	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 040 005 .014 .010 023	•110 •066 -040 -055 -062 -025 •013 •026 •016 -•017	•129 •107 •027 •011 •009 •021 •007 •014 •037 •024 •014 •033 •024 •033 •033 •147 •129 •039	.167 .190 .146 .125 .106 .048 .010 -017 .030 .024 020	.216 .272 .261 .229 .203 .123 .006 054 060 078	.268 .350 .374 .338 .300 .201 .093 093 206 1179	.302 .412 .475 .441 .390 .279 .155 095 245 308 427	.277 .387 .443 .498 .553 .609 .664 .719 .830 .871
277 367 387 443 498 553 609 664 7774 830 871	.048 055 209 217 233 311 136 002 011 .005 018	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 040 005 .014 .010 023	*110 *066 *-040 *-046 *-055 *-062 *-025 *013 *-026 *-017 *-017	•129 •107 •027 •011 •009 •021 •0037 •024 •037 •024 •033 •147 •129 •039 •019	.167 .190 .146 .125 .106 .048 .010 .024 020 .024 020	.216 .272 .261 .229 .203 .123 .046 054 054 078	.268 .350 .374 .338 .300 .201 .093 206 191 179 .106 .299 .381 .404 .367	.302 .412 .475 .441 .390 .279 .105 .245 -308 -427	.271 .387 .498 .553 .609 .664 .774 .830 .871
277 367 387 443 498 553 6609 6664 719 774 830 871	.048 055 209 217 233 311 136 002 .011 .005 018	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 005 .014 .010 023	.110 .066 -040 -055 -062 -025 .013 .026 .016 -017	•129 •107 •027 •011 •009 •021 •007 •014 •037 •024 •014 •033 •024 •033 •033 •147 •129 •039	.167 .190 .146 .125 .106 .048 .010 017 .030 .024 020	.216 .272 .261 .229 .203 .123 .0046 054 078	.268 .350 .374 .338 .300 .201 .093 206 191 179	.302 .412 .475 .441 .390 .279 .155 245 308 427	.277 .387 .498 .553 .609 .774 .830 .871
277 3367 3387 4493 4498 550 6664 7774 830 871	.048 055 209 217 233 311 136 002 011 .005 018	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 005 .014 .010 023	•110 •066 •040 •046 •0055 •062 •016 •016 •017 •016 •137 •095 •021 •073	•129 •107 •027 •011 •009 •021 -007 •014 •037 •024 014 ; q = 38: •033 •147 •129 •039 •019 -•015	.167 .190 .146 .125 .106 .048 .010 .024 020 .024 020	.216 .272 .261 .229 .203 .123 .046 054 054 078	.268 .350 .374 .338 .300 .201 .093 206 191 179 .106 .299 .381 .404 .367	.302 .412 .475 .441 .390 .279 .105 .245 -308 -427	.271 .387 .498 .553 .609 .664 .774 .830 .871
277 3367 3493 4493 4553 6609 7774 830 871 166 277 387 443 443 459 6604 7779	.048 055 209 217 233 311 136 002 .011 .005 018	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 040 .010 023	.110 .066 -040 -040 -055 -062 -025 .013 .026 .016 -017 = 0.980 .016 .137 .095 -021 -031 -073 -144 -150 -136	.129 .107 .021 .009 .0011 .009 .014 .037 .024 .014 .033 .024 .033 .047 .129 .039 .019 .019 .019 .019 .019	.167 .190 .146 .125 .106 .048 .010 .024 -020 .024 -020 .072 .194 .214 .165 .140 .111 .051 .001	.216 .272 .261 .229 .203 .123 .046 .054 .0054 .078 .078	.268 .350 .374 .338 .300 .201 .093 .093 .206 179 .106 .299 .381 .404 .367 .331	.302 .412 .475 .441 .390 .279 .155 095 245 308 427	.277 .367 .498 .553 .664 .719 .830 .871
277 367 367 443 498 609 664 771 774 830 871 166 277 367 443 458 5609 664 477 774	.048 055 209 217 233 311 136 002 .011 .005 018	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 040 .010 .010 .023	*110 *066 *-040 *-046 *-055 *-0025 *-013 *-026 *-016 *-017 *-017 *-021 *-025 *-021 *-025 *	•129 •107 •027 •011 •009 •021 •0037 •014 •037 •024 •033 •147 •129 •039 •019 •019 •019 •019 •019 •019 •019	1145 1146	.216 .272 .261 .229 .203 .123 .006 054 054 078 .289 .290 .224 .147 .070 076	.268 .350 .374 .338 .300 .201 .093 093 206 1179 .106 .299 .381 .404 .367 .331 .237 .139 029 087	.302 .412 .475 .441 .390 .279 .1095 245 325 427 .110 .343 .448 .510 .475 .428 .322 .201 029 158	.277 .347 .449 .553 .664 .719 .830 .871 .166 .277 .387 .443 .609 .664 .714
277 387 443 5553 609 664 7774 830 871	.048 055 209 217 233 311 136 002 018 013 013 017 175 195 212 323 323 323 321 329 -	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 005 .014 .010 023	*110 *066 *-040 *-046 *-055 *-0025 *-0013 *-026 *-017 *-017 *-016 *-017 *-016 *-017 *-021 *-021 *-021 *-021 *-021 *-036 *-024 *-036 *-024 *-036 *-024 *-036 *-024 *-036 *-024 *-036 *-025 *-	•129 •107 •027 •011 •009 •021 -007 •014 •037 •024 -•014 •033 •147 •129 •039 •019 •015 -005 -007 •026	.167 .190 .146 .125 .106 .048 .010 .024 020 .024 020 .072 .194 .214 .165 .140 .111 .001 .001 .001 .001	.216 .272 .261 .223 .123 .006 054 060 054 078 .286 .246 .305 .286 .224 .147 .070 .096 109	.268 .350 .374 .338 .300 .201 .093 206 191 179 .106 .299 .381 .404 .367 .331 .237 .139 029 029	.302 .412 .475 .441 .390 .279 .155 308 427 .110 .343 .448 .510 .475 .428 .323 .201 029 158 .271	.277 .367 .498 .498 .609 .664 .719 .836 .871
277 387 443 498 553 609 664 771 830 871 166 277 367 443 455 387 443 456 609 664 777	.048 055 209 217 233 311 136 002 .011 .005 018	.064 020 158 159 241 053 008 .011 .007 021	.088 .023 096 101 131 110 040 .010 .010 .023	*110 *066 *-040 *-046 *-055 *-0025 *-013 *-026 *-016 *-017 *-017 *-021 *-025 *-021 *-025 *	•129 •107 •027 •011 •009 •021 •0037 •014 •037 •024 •033 •147 •129 •039 •019 •019 •019 •019 •019 •019 •019	1145 1146	.216 .272 .261 .229 .203 .123 .006 054 054 078 .289 .290 .224 .147 .070 076	.268 .350 .374 .338 .300 .201 .093 093 206 1179 .106 .299 .381 .404 .367 .331 .237 .139 029 087	.302 .412 .475 .441 .390 .279 .1095 245 325 427 .110 .343 .448 .510 .475 .428 .322 .201 029 158	.277 .367 .498 .553 .664 .719 .830 .871

TABLE V. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF O.E ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(d) Station D - Concluded

			,	(d) Stati	on D - C	oneruded				
x/l	a = -40	a = -2º	$\alpha = 0^{\circ}$	a = 2°	a = 4°	a. = 8°	a = 12º	α = 16°	$\alpha = 20^{\circ}$	x/l
			м	= 1.030;	q = 400	lb/sq f	t			
.166	.052	•058	.054	•069	•077	•110	• 14	.140	•155	•166 •277
• 277	1 126	126	.141	.129	•179	.246	- 98	.354	•393	.367
. 367	.135 .048	•135 •078	104	145	174	270	• >53	.437	.499	4387
• 387 • 443	104	068	028	025	086	.218	. 138	•457	•559	.443
498	125	080	034	022	•073	.190	•306	•421	•524	• 498
• 553	143	105	059	015	.034	.164	• 276	•382	+477	•553
•609	228	188	142	092	027	•103	a ≒96	•291	.379	•609
.664	254	203	158	101	041	.061	• .26	•198	.267	•664
.719	137	111	100	073	069	062)58	027	.033	•719
.774	062	033	024	032	044	072	170	003	•013	•774
830	048	035	031	028	041	061	082	062	137	.830
.871	076	077	087	094	114	151	193	271	360	.871
	<u> </u>		м	I = 1.125	; q = 421	lb/sq f	`t			
	0.55	021	•035	•042	•049	•076	. 279	.081	.073	.166
.166	•022	•024	•035	8042	•047					.277
• 277	.004	007	007	025	041	066	386	.162	•406	.367
•367 •387	024	050	.079	105	•137	•187	• 306	•440	•547	.387
.443	079	047	-008	039	.081	•202	•337	•483	•622	.443
.498	104	059	008	.033	.088	.197	+316	•45B	•595	•498
.553	084	054	012	.022	.056	•171	.297	•434	•559	•553
•609	190	151	095	056	011	•121	.239	•364	•470	•609
.664	204	158	109	062	012	•100	.193	.287	•371	+664
.719	123	105	083	065	048	006	.018	.069	•151	•719
.774	052	044	038	035	036	034	034	•076	.128	•774
830	029	026	017	019	025	029	038	.019	005	.830
.871	056	066	070	085	097	127	150	158	206	.871
	<u> </u>	<u> </u>	<u> </u>	M = 3 20	0; q = 4	36 1b/so		<u> </u>	l	1
	.021	.035	.044	•057		.087	$\overline{}$.091	.100	.166
• 166	1 .021	1 .000	****	•••	"""	```	1	1		▶277
• 277	025	008	.008	.009	035	054	065	086	098	.367
.367 .387	.037			030		-162			+467	.387
.443	059			058	•107	•209			∙592	+443
498	074		1	•063	•111	•214			•557	•49B
•553	053			.055		•195			•531	•553
609	140			032		.108			•458	•609
+664	179				001	•104			•377	•664
.719	119			056	033	•015			•138	.719
.774	062			039		016			•002	•774
830	019					022			077	-830
.871	056				094	127	- 155	207	222	.871

TABLE V.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 0.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(e) Station E

		 -								
x/l	a = -1	φ α = -	2 ⁰	O a = 2	2° a = 4	0 0 = 1	8° a = 1	2º a = 10	50 a = 20	0° x/1
				M = 0.800	D: a = 31	10 1b/cc	f+			L
•055	0.0		. 1	. 1	1	10/50	1 0			
166		8 •04	•06	3 .09	2 •11	.8	78 .24	.33	0 .40	.055
•277		903	202	000	ده. اه		ا			- 166
• 367		3 .02	5 02	0 .05						
• 387				1 .02						
• 443 • 498	18					1 .13				
.553	16				- 1			4 0275		
•609	12									
•664	05	803	801	6 .00						
•719 •774	03				7 .00					
830	00						9 .01			
.871	02							_		•830
• 954	.06								,	
				1			.03	0 030	•012	• 954
				M = 0.90	0: a = 34	58 1h/ea	C+			
055	.032	.04	1	!	1			344	422	1 055
•166 •277			.1			1	•••	•344	• 423	•055
• 367	028		1				9 •134	.215	•303	•166 •277
.387	062									-367
• 443	196							1	• 444	•387
• 498	230	1	111						•434	• 443
•553 •609	270				011	.086			•393	• 498 • 553
• 664	064				009		•123		.261	• 609
•719	030			004	•023				+167	.664
•774	001	002	.003	005	•004	•025			043	•719
•830	004		002	001	.007	+035			172	•774
•871 •954	023			037	035	034			237	.830 .871
	1039	•053	•055	•049	•051	+045	•030		033	.954
				= 0 olo	7/0				<u> </u>	<u></u>
•055	.038	.053	•075	= 0.940;	•126		T	Τ	T	
166		1		,	1 *128	•185	•259	•354	• 436	•055
•277 •367	026	031	025	011	•018	•063	.134	•223	•316	•166 •277
• 387	040	018	.009	•101	•143	•213	•308	•414	•518	•367
• 443	186	139	091	040	•076	•158	•256	•356	+462	•387
+498	227	170	121	066	008	•126 •100	•237	•344	•451	• 443
•553 •609	257	215	~+155	084	023	•078	174	272	•411	•498 •553
4664	305 132	247 042	113	062	020	•052	•126	.207	-285	•609
•719	014	018	023 013	005 .000	•014 •005	•039	•0B2	•135	•195	•664
•774	•005	.002	005	•016	•028	-•010 •018	032 057	049	007	•719
· B30	003	004	002	•004	•014	.010	058	165	162 195	•774 •830
•871 •954	026 -059	031 .058	030	-•032	028	042	098	221	367	•871
	•••	1038	•056	•057	•052	•044	•032	•006	040	•954
			м	1 = 0.980	; q = 385	lb/sq f	`t			
055	•050	•064	.087							
166			•307	•114	•138	•205	•277	• 363	•463	055
277	017	025	020	007	•019	.073	.152	•242	.346	•166
367	003	•100	•067	•131	•161	.237	•339	• 445	•554	•277 •367
443	157	-024 -0108	.048 073	•068	•097	•181	•284	•387	494	.387
498	208	150	099	025 055	001	-144	•267	•370	∙485	443
553	238	190	139	102	046	•117 •086	•236	•340		•498
609	293	-+248	196	148	066	•053	•200 •150	•301 •240		•553
719	-•298 -•119	~ 240	187	128	043	•027	.104	176		•609 •664
774	.012	-0081	044	036	082	-•095	055	•011		719
830	.015	025	.024	•016 •020	009	077	069	071	~.082	•774
871	004	005	010	018	-014	017 055	102 233	115		830
954	•0B1	•074	.074	.066	•066	•058	.007			871
								•=07	0 7 4 4	954

TABLE V. - PRESSURE COEFFICIENTS AT STAGNATIO 1 PRESSURE OF 0.5 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Concluded

(e) Station E - Concluded

x/l	a = -4°	a = -2°	a = 00	a = 20	a = 4°	a = 8°	α = 12 ^c	a = 16°	a = 20°	x/l
	<u> </u>		M =	1.030;	q = 400 1	b/sq ft				
							.318	.406	.498	.055
•055	•096	.113	.131	•151	•176	.243	• 510		• • • • • • • • • • • • • • • • • • • •	. 166
. 166	1		205	224	.036	.072	180	.284	.385	.277
• 277	009	002	.005	.016	•191	289	.388	.499	.600	.367
• 367	•156	.108	.044	•130 •119	140	232	.331	440	.543	. 387
.387	•066	.088	.116	.022	074	197	.315	429	.535	.443
. 443	083	052	021	001	.049	169	.283	.396	.501	.498
498	138	096	055 085	043	009	.133	.248	.354	.452	.553
. 553	163	127	138	093	028	103	.201	•299	.385	.609
•609	216	182 177	134	079	018	.084	.159	.238	.305	.664
.664	225	129	118	079	068	041	009	•049	.115	.719
•719	173	039	026	040	049	073	056	•021	•057	•774
•774	059	047	040	037	049	062	068	023	040	.830
830	088	090	101	114	139	170	191	217	248	.871
. 871 . 954	042	049	053	073	091	107	141	183	213	. 954
	L		м	= 1.125;	q = 421	lb/sq ft		<u> </u>	<u> </u>	L
	.060	•077	.103	•123	•148	•209	•275	.364	•442	.055
.055	•080	1 •017	•105		0240				1	. 166
166	012	014	002	.006	.021	4062	.114	.169	•239	.277
• 277	012	014	019	013	005	•045	.08F	.219	• 596	.367
. 367	021	014	.025	.021	.020	.050	•21 ⁶	•409	.579	- 387
. 387	061	030	.002	.038	.070	•179	31(-	•451	4597	• 443
.443	099	068	024	.015	.060	.176	.294	.434	•570	-498
•498 •553	131	091	043	008	.036	•147	•27]	•409	•535	.553
.609	173	136	091	049	006	•120	•240	•364	•472	-609
.664	182	138	083	042	.006	.122	•229	.321	.405	-664
719	173	141	104	072	043	.026	•070	•143	•228	•719
.774	054	056	049	048	-+044	030	014	+081	.169	• 774
830	033	034	027	029	032	021	01 .	.073	-068	.830
.871	064	081	092	107	122	131	13 ·	105	107	.871
954	.030	.002	019	043	056	071	036	058	071	.954
	<u> </u>	<u> </u>	М	= 1.200	; q = 436	1b/sq f	t			
•055	•077	.098	.116	•139	•170	.231	•293	.373	• 464	.055
. 166	1 .			000	.040	-078	134	.183	.257	.277
.277	005	.005	-013	•023	.012	.041	109		235	-367
. 367	019		•001	•001	.012	-046	078		.378	· 3B7
.387	.010		.019	•021	104	209		417	.552	.443
• 443	029			066	.084	185	3C3	.412	.537	.498
	082				-067	.165	1	392	.511	.553
.498		056	018		.020	122			.464	.609
.553	102		0.71							. 444
.553 .609	139	101	071					.333	.414	1000
.553 .609 .664	139 153	101 111	061	014	•033	- 128	.241		.229	719
.553 .609 .664 .719	139 153 172	101 111 137	061 101	014 065	-025	•128 •049	•241 •122	.169		
.553 .609 .664 .719	139 153 172 060	101 111 137 059	061 101 056	014 065 047	-033 -025 -039	•128 •049 -•011	•241 •122 •018	•169 •034	.229	.719
.553 .609 .664 .719 .774 .830	139 153 172 060 017	101 111 137 059	061 101 056 015	014 065 047 011	-033 025 039 004	•128 •049 ••011 •006	.241 .122 .018	.169 .034	•229 •082	.719 .774
.553 .609 .664 .719	139 153 172 060 017	101 111 137 059 016	061 101 056 015 090	014 065 047 011 095	-025 -025 -039 -004 -105	•128 •049 -•011	.241 .122 .018 .008	.169 .034 .056	•229 •082 •076	.719 .774 .830

TABLE VI.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING

(a) Station A

x/l	g = -1,0	a = -2°	a = 0,0	a = 20	a = 40	α = 8°	$\alpha = 12^{\circ}$	$\alpha = 16^{\circ}$	$\alpha = 20^{\circ}$	x/l
^/, ·	<u> </u>] u	1 - 0	L W - Z	u - 4	$\alpha = 8^{\circ}$	W - 12	gr = 10	u = 20	Α/ ι
			М	= 0.800;	q = 627	lb/sq ft	t			
•055]				1	<u> </u>	1	1	1	055
•166	•046	•026	•010	003	017	029	031	030	044	•055 •166
•277	•029	•009	005	018	031	036	023	-010	013	• 277
• 367	•091	•062	•036	•010	015	060	102	137	160	•367
• 387	•103	•064	•027	006	045	107	170	~. 255	281	•387
•415	•075	•028	018	062	109	202	304	394	439	.415
• 443	•049	002	052	100	154	262	386	437	472	. 443
• 498	•038	015	068	120	174	266	346	376	378	. 498
•553	•012	034	081	-•128	176	-•244	269	331	- •304	•553
•581 •609	_ 000	- 000								•581
•636	-•009 -•013	034 042	-•059	110	144	189	-•221	300	~∙305	•609
• 664	018	042	068 057	092	-•117	139	-•192	-•285	- •328	•636
•692	003	018	030	073	090	103	154	262	-•361	.664
•719	.019	4008	002	040	052	~•050	094	~•191	327	•692
•774	•019	.014	•011	~•010	016	002	039	120	268	•719
●830	.001	000	•002	•008 •003	•005 •002	•017	006	~•062	187	•774
•871	.011	•011	.014	•015	.015	•009	•000	034	106	.830
954	•020	.026	•032	•038	039	•023 •038	•017 •036	004 .025	037	•871
		••20	• • • • •	• • • • •	•039	.038	•036	• V25	•043	• 954
				0.000						_
			м	= 0.900;	q = 713	lb/sq ft				
•055	l l				1					•055
. 166	•043	•022	• 006	008	017	025	027	019	025	.166
• 277	•021	• 001	014	024	030	025	004	•025	.031	.277
• 367	•104	•074	•051	.030	•015	011	 034	045	082	• 367
• 387	•117	•077	.043	.012	014	-•057	105	174	- ∙225	• 387
• 415	•085	•035	009	053	091	-•161	234	337	417	•415
• 443	•050	004	054	104	150	240	326	419	411	• 443
• 498 • 553	•026	032	088	145	195	280	391	472	417	• 498
•553 •581	-•011	069	~•131	-•207	-•265	347	454	314	424	•553
•609	027	059	093	- 140	22.					• 581
•636	034	067	099	163	214	-•429	468	400	360	•609
• 664	032	055	074	-•132 -•091	151	444	432	454	385	• 636
• 692	010	024	035	044	-•094 -•044	-•142 -•019	121	486	393	• 664
•719	.014	•004	004	010			087	431	418	•692
•774	•015	.012	.009	-010	-•006 •013	•029 •041	055	128	279	•719
830	006	004	002	001	•006	021	030 017	114 069	272	•774
•871	.006	007	.009	•011	.017	•030	-0017	023	183	·830
954	•018	025	032	•038	.042	•041	•033	.023	103 000	•871 •954
				0		4071		• • • • •	000	• 724

TABLE VI.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(a) Station A - Continued

x/l	a = -140	a = -20	$\alpha = 0^{O}$	$\alpha = 2^{0}$	a = 40	a = 80	ιι = 12 ⁰	a = 16°	α = 20 ⁰	x/l
	11		М	= 0.940;	q = 743	lb/sq ft				
•055						222	000	000	011	•055 •166
.166	•044	•020	•003	010	017	027	022	009	013 .054	• 277
• 277	•021	003	018	029	030	024	•007 •003	-0041 004	035	367
• 367	117	•085	.063	•045	•036	.014	068	128	177	• 387
• 387	•131	.089	•056	•028	.008	029 131	194	292	- 372	•415
•415	•096	•043	000	039	-•070 -•133	216	284	379	461	443
• 443	058	001	050	096 141	189	267	364	437	342	498
•498	•025	-•037	090 166	215	254	~.333	419	- 456	414	•553
• 553	028	105	-4160	-0217	•254	• , , , ,	, ,,,,			.581
•581	- 041	087	154	269	315	-5411	499	276	489	.609
•609	041 051	094	132	287	343	442	511	465	512	.636
.636	042	065	078	167	341	468	509	438	479	• 664
•664	010	023	030	029	087	426	467	~.443	45 5	•692
•692 •719	•019	•008	•001	.006	•010	013	039	319	365	•719
•774	.019	•013	•011	.016	032	055	008	214	273	•774
830	005	006	004	•002	.018	•041	017	096	254	.830
•871	.006	.006	.007	.011	.025	.044	•005	049	150	•871
• 954	.023	.027	.032	.038	•048	•054	•039	•017	033	•954
	<u> </u>			- 0.080	q = 771	lb/sa ft	tt	L	<u> </u>	
	Τ		M	= 0.900,	4 - 11-	12/54 1	T	1	Τ	255
•055	1								1	•055
.166	•048	•028	•014	001	011	-,018	010	1	ļ	•166 •277
•277	•023	•001	012	023	026	012	•027		ł	.367
• 367	•139	•112	•094	•078	•067	.052	•046		ł	387
• 387	•154	•118	•090	•063	•043	•012	023		1	•415
•415	•117	•071	•032	004	036	084	151			.443
• 443	•076	•024	021	062	102	168	233			498
498	•037	014	063	119	163	233	373			•553
• 553	044	095	138	138	-•230	297	-+3/3			.581
•581			١ ,,,	25.	200	295	461			609
•609	069	125	211	258	299	409	491			636
• 636	112	177	235	286		436	519	1	1	.664
• 664	145	203	253	308 301	356 345	444	541	1		692
•692	138	201	254 062	108	181	336	500	1		•719
•719	012	017	062	108	025	054	091			•774
•774	•013	•037	033	.040	043	027	012	1		.830
.830	003	•017	036	.043	•051	.061	.020			.871
.871	•012	.026 .043	.057	065	075	091	075		1	•954
• 954	•032	•047	1 .097			1		<u> </u>	<u> </u>	

TABLE VI.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(a) Station A - Continued

x/l	a = -140	a = -2°	$\alpha = 0^{\circ}$	$\alpha = 2^{\circ}$	a = 4°	a = 8°	α.= 12 ⁰	$\alpha = 16^{\circ}$	$\alpha = 50^{\circ}$	x/l
	<u> </u>			1	<u>. </u>	!	L	ł		
	1	,	М	= 1.030;	q = 803	lb/sq ft				
•055										•055
• 166	•089	•068	•056	•041	•032	•014	•016	ŀ		• 166
•277 •367	•033	•013	•007	008	014	026	•067			• 277
	•189	•152	•128	•113	•107	•115	•114	ľ	'	• 367
•387 •415	•208 •174	•166 •122	•136 •081	•112	•095	•078	•047			• 387
• 443	•174	•122	•030	•048	•022	012	079			• 415
498	•09B	1	019	008 068	042	094	157			• 443
•553	•019	038	019	131	105 167	162	250 298			• 498
•581	•01	.033	000	-0131	101	226	298			• 553
•609	033	077	153	201	232	309	392			•581 •609
•636	061	121	-• 184	227	264	338	414			•636
• 664	091	145	204	249	287	365	440			• 664
.692	106	153	204	244	281	377	462		ļ	•692
.719	078	106	138	160	190	- 305	444	i	ľ	•719
•774	043	038	025	039	053	087	116	J		•774
.830	069	063	049	053	058	070	072			830
·871	054	~•049	041	044	046	046	030			.871
• 954	141	-•124	-•089	066	050	038	049			• 954
		<u> </u>								
			М	= 1.125;	q = 856	lb/sq ft				
•055			}							•055
• 166	•058	• 044	•034	•018	•002	009	-•015	l	ļ	.166
• 277	•028	.017	•006	007	015	025	023	į		•277
• 367	013	019	024	026	026	016	•007	ľ		• 367
• 387	•113	•086	•070	• 056	•047	•032	•045	ł	İ	• 387
• 415	•164	• 124	•096	.063	•032	021	052			• 415
• 443	•132	•087	•053	•017	017	076	111			• 443
• 498	•099	.047	•007	038	078	130	189	1		• 498
•553	•039	013	052	093	127	184	231		i	•553
•581		05.0			1	[1	- 1		•581
•609	015	052	120	166	191	247	297		į	• 609
•636	047	099	139	181	214	273	322		i	•636
• 664 • 692	061	117 112	156	196	232	297	351			• 664
•719	063	103	153 134	199 168	238	307	370	1		•692
774	027	033	038	040	198	277	360		l	•719
830	051	045	043	038	046 037	054	077		İ	•774
871	036	031	027	021	018	034	030			.830
954	080	076	059	021	019	009	•000	1		871
¥ /37	••••	.,,,	• • • • •	•••		•000	.019			• 954

TABLE VI.- PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WIIG - Continued

(a) Station A - Concluded

x/l	a = -40	a = -20	a = 0°	a = 2°	$\alpha = 40$	$\alpha = 8^{\circ}$	α = 12 ⁰	$\alpha = 16^{\circ}$	$\alpha = 20^{\circ}$	x/l
			М	= 1.200;	q = 888	lb/sq ft		17		NE E
.055 .166 .277 .367 .387 .415 .498 .553 .581 .609 .636 .664 .692 .719 .774 .8370 .871	.075 .040 .004 .038 .169 .126 .070 .006 -024 -037 -054 -054 -048 -048	097 057 050 037	134 059	.032 .007 020 .034 .069 .039 013 059 171 172 168 064 044	040 013	269 069	004 008 022 .043 038 098 163 206 278 294 311 335 340 083 017 .004			.055 .166 .277 .387 .415 .443 .553 .581 .609 .636 .644 .692 .719 .774 .830 .871

TABLE VI. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued (b) Station B

					Station	D				
x/l	a = -110	a = -2°	α = 0°	$\alpha = 2^{\circ}$	$\alpha = t_0$	a = 80	a = 120	a = 16°	a = 500	x/1
				M = 0.800	D; q = 62	7 1b/sq	f't.		<u> </u>	<u> </u>
•166 •277 •367 •387 •443 •553 •609 •664 •719 •774 •830 •871	.030 .005 .108 .158 .070 .012 040 029 021 .005 .016 001	-022 -002 -084 -114 -011 -086 -062 -039 -001 -000 -009	.012 -009 .057 .068 -046 -093 -191 -094 055 -005 .003	001 020 .029 .020 105 146 177 127 071 .001 .003 004	016 035 008 035 169 206 230 163 088 016 008	045 059 083 147 306 341 351 235 113 015 .010 .007	077 076 163 270 466 465 397 314 191 070 007 000	101 086 235 405 547 560 514 433 349 180 051 021 007	122 100 265 444 629 587 614 607 378 150 073 040	•166 •277 •367 •387 •443 •498 •553 •604 •719 •774 •830 •871
			1	M = 0.900); q = 71	3 lb/sq (`t.		-	
• 166 • 277 • 367 • 387 • 443 • 553 • 609 • 664 • 719 • 774 • 830 • 871	.027 000 .120 .177 .071 .002 065 053 036 .003 .012 008	*018 -010 *095 *130 *010 -057 -124 -094 *056 -003 *011 -006 -012	.007 018 .071 .086 048 113 186 137 073 006 .011 003 010	005 027 -048 -041 107 169 269 185 089 008 -011 000	016034024001161220331292092005014005	041 048 029 089 270 341 445 477 170 .010 .027 .016 .013	~•072 -•057 -•085 -•191 -•394 -•473 -•563 -•520 -•207 -•082 -•038 -•017 -•006	087 053 125 291 508 557 470 560 560 560 560 560 560 560 560 560 560	103 059 173 375 510 580 605 640 421 222 155 105	•166 •277 •367 •387 •443 •498 •553 •609 •719 •774 •830 •871
			м	= 0.940;		lb/sq fi		·		
*166 *277 *367 *387 *498 *553 *609 *664 *719 *774 *830 *871	-029 -001 -135 -191 -078 -000 -085 -072 -046 -009 -018 -008015	.016 014 .106 .143 .013 061 165 129 065 .003 .013 007 013	.005 -023 .083 .101 -043 -112 -228 -213 -076 -001 013 -004 -011	006 031 -061 -060 097 163 275 298 153 009 001 006	015 -035 043 023 -140 -213 -316 -346 -343 009 032 016 008	042 047 003 059 243 322 424 464 059 .033 .034 .018	066 045 045 148 345 520 563 519 116 032 024 007	080 036 078 238 459 553 466 534 302 211 101	091 037 121 324 568 591 674 669 369 207 154	•166 •277 •367 •387 •443 •498 •553 •609 •664 •719 •774 •830 •871
r			М	= 0.980;	q = 771	lb/sq ft				
• 166 • 277 • 367 • 387 • 443 • 498 • 553 • 609 • 664 • 719 • 774 • 830 • 871	107 107 157	038 157 181 216	272	-•138 -•244 -•281 -•319	330 363 148	037 .036 015 197 282 381 427 466 262 076	054 026 .000 098 378 468 517 574 331 141 043			.166 .277 .367 .443 .498 .553 .609 .664 .719 .774 .830

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TABLE VI. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF 1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(b) Station B - Concluded

x/l	a = -4°	a = -2°	a = 0°	a = 2º	a = 40	a = 8°	a = 12°	a = 16°	a = 20°	x/l
					0	/				
			М	1.030;	q = 803	TP/BG IC			T	
<u>.166</u>	.074	.065	.059	.045	.035	.001	027		1	.166
277	.014	.004	.003	009	018	048	.015			367
. 367	.207	•171	. 148	•126 •142	.115	.052	025			• 367
. 387	.268 .151	.218	.177	010		121	217	1	1	• 443
.443	073	016	039	087	125	207	297		i	.553
553	043	094	142	-,184					1	.609
.609	061	121	178 217	222	262				1	.664
• 664	106	160	114	127	149	221	291		ŀ	.719
.719	050	041	026	041						.830
. 830	074	067	051						İ	.871
. 571	066	064	057	061		-••*	'\ ''	1	1	Ì
	1	l l	1	1		1	<u> </u>			<u> </u>
	<u> </u>	<u> </u>					_			
				(= 1.125	; q = 85	6 lb/sq :	~ -			Τ
		.041	.034	.024	.000	02	05	•		1.266
:166	.047			004	01	04	07			1 .277
367		019	012						1	387
. 387	.216					- I				.443
.443	•145						B -•24			.498
.498 .553	017			14	17	6 25				.553
.609	04									.664
. 664	079				·	- 1				•719
.719	04						509		1	1774
.774				03	904				\	.830 .871
.871	04			03	203	06	2 -•05	'	- 1	****
	Ì	1	1	1	1	1	Į.			
						0 11 /				
			 _	1.200						1.144
. 164										277
.277	-02								1	. 367
• 367						8 .01	70	9		• 387 • 443
• 361 • 443				7 .02	701				1	490
491	.09	9 .05	5 .01						- 1	.55
• 553	.02								- 1	- 601
•60			-			72	16 -05	78		. 664
71			_	712	1	91				.71
1:77	04	304	a 0!	20					- 1	.03
. 83	000								1	.87
.87	104	04	10	~ -••	~ -•°	~ **		- 1		
1		1	i	ı		I		1	ı	

TABLE VI. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF
1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued
(c) Station C

x/l	a = -40	a = -20	or = 00	a = 20	a = 40	a = 80	α = 12°	α = 16°	a = 20°	x/2
			м	0.800	; q = 627	lb/sqf	t		•	<u>. </u>
.055 .166 .277 .353 .367 .692 .714 .830 .871	004 023 .223 .039 .014 001 .019 .025 .039	.005 013 .278 .040 .014 .000 .021 .026 .040	.009 009 .313 .044 .015 .002 .018 .028 .042	.004 013 .330 .048 .018 .002 .022 .031	008 027 .335 .051 .020 .005 .028 .035	046 063 287 050 026 010 038 045 037	109 122 -143 -009 -007 008 -033 -040 -041	193 199 068 027 064 064 008 034 049	304 289 300 168 230 178 073 004	.055 .166 .277 .353 .367 .692 .719 .774 .830 .871
	· · · · · · · · · · · · · · · · · · ·	l	1	M = 0.90	O; q = 7:	13 1b/sq	ft			
.055 .166 .277 .353 .367 .692 .719 .774 .830 .871	007 026 .257 .039 .014 004 .015 .021	.001 019 .298 .039 .014 001 .017 .023	.004 017 .320 .044 .015 .001 .014 .025 .042	.000 020 .337 .047 .020 .004 .019 .028 .043	008 028 .349 .055 .030 .011 .029 .035	041 056 .326 .043 .048 .030 .049 .051	104 107 -227 048 018 047 .008 .027 .044	181 169 013 150 159 066 007 047	281 246 137 159 265 310 201 080 .021	.055 .166 .277 .353 .367 .692 .719 .774 .830 .871
			<u> </u>	M = 0.94	0; q = 7 ¹	3 lb/sq	ft			
.055 .166 .277 .353 .367 .692 .719 .774 .830 .871 .954	007 025 .276 .041 .028 .004 .016 .022 .042	.000 023 .310 .045 .021 .000 .015 .023 .043	.001 022 .327 .047 .021 .003 .013 .023 .043	003 025 .344 .048 .034 .011 .020 .028	008 029 .358 .019 .036 .026 .037 .042 .048	043 056 -341 073 016 .031 .056 .058	096 096 260 159 062 060 016 .014	173 153 101 154 182 260 155 049 .038	276 226 079 152 238 323 282 167 001	.055 .166 .277 .353 .367 .692 .719 .774 .830 .871
			<u></u>	M = 0.980	; q = 77	l 1b/sq 1	rt			
•055 •166 •277 •353 •367 •692 •719 •774 •830 •871 •954	001 021 .301 090 048 001 .023 .032	.008 017 .332 084 023 .026 .041 .042	.011 015 .350 080 024 .035 .043 .050	.007 019 .363 078 038 .024 .043 .053	001 025 -375 098 084 004 004 059 067	033 045 365 147 170 087 011 047 072	084 079 .294 222 190 137 103 024			+055 +166 +277 +353 +367 +692 +719 +774 +830 +871 +954

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TABLE VI. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(c) Station C - Concluded

x/l	a = -4°	a = -2°	a = 0°	1 = 20	a = 40	a = 8°	a = 1.º	a = 16°	a = 20°	x /2
	1				1 = 803 11	h/so ft				
				1.050; 9	1 30) 1	7				•055
.055 .166	.042	.049	.055	.050	.042	-002	016			• 166 • 277
. 277	009	004	-005	000	008	· .				. 353 . 367
. 367	.323	. 333	.350	062	061	091	•347 -•160			692
.692	049	062	067	073	078	122	-, 154			.719
.774	078	060	039 034	051 040	044	111	150 125			.830
.830 .871	047 031	032	025	029	032	052 089	056 113			.954
. 954	092	090	077	076	078	089	113			• • • • • • • • • • • • • • • • • • • •
			ł	1	ŀ					
			м -	1.125;	q = 856 1	Lb/sq ft		_		
	T					<u> </u>				.055
.055	.016	.024	.030	.028	.016	022	086		1	• 166 • 277
.277	004	.006	•010	•007	006	045	119			. 353
.353	.207	. 253	•271	.281	.281	• 242	091	Į	1	• 367 • 692
. 692	045 061	043 057	040 059	039 059	040 041	050 070	080	ł	1	.719
.719 .774	056	046	044	046	051 027	072	095 082			.774
.830 .871	030	022	025	025 002	003	015	022			.871
954	040		052	056	058	068	- ₀052			• • • • • • • • • • • • • • • • • • • •
	1							1		
		ļ				<u> </u>	<u> </u>			
			м -	1.200;	q = 888 1	lb/sq ft				
•055					955	014	077	,		.05!
•166 •277	.032			.041 .011		014				.277
. 353	1					.236	.11	J	1	.35
. 367 . 692	046				033	034	06)		1 697
.719	06	061	061	058	058				1	•71
• 774 • 830				037	043	063	09	7		•830 •87
.871	00	2004	003	.000		016				95
a 954	07	B073	072	0/2	-••		1	1		
i		1	1			ı	1	1	ı	
				1					l l	1

TABLE VI. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(d) Station D

x/l	a = -4°	a = -2º	a = 00	a = 20	a = 40	a = 8°	a = 12º	a = 16°	a = 20°	(-
<u> </u>	u4	u = -2"	a = 0	d = 2-		u = 0	d = 120	a = 16	a = 20°	×/1
			м	= 0.800;	q = 627	lb/sq ft				
.166	•012	.026	.037	+046	•053	•067	.078	.078	•075	.166
•277 •367	004	.029	.061	.085	-104	.148	.189	•221	•250	•277 •367
.387	104 204	049	073	•046 -•020	•084 •031	•161 •141	•235 •244	•292 •332	•347 •422	•387 •443
• 443 • 498	186	135 123	069	020	•026	•128	•222	•302	.384	.498
•553 •609	164 127	117 091	070 056	032 024	.005	•089 •072	•168 •124	.234 .166	•301 •213	•553 •609
.664	065	046	026	010	•007	+047	•067	.074	.081	.664
•719 •774	015 -009	007 .013	.001 .019	•008 •022	•014 •025	.033 .036	.024 .024	018 021	095 123	.719 .774
.830	.018	.021	.023	•026	•025	•031	.024	•000	083	.830
.871	007	009	010	012	013	015	029	029	096	.871
		:								
			м	= 0.900;	q = 713	lb/sq f	t			
- 166	•011	•024	.033	•043	•054	•072	.083	.093	•098	•166 •277
•277 •367	.02B	.052	.076	.099	•121	. 166	.211	.253	.289	.367
.387	080 217	032 149	.013 087	•057 -•029	•098 •028	•179 •145	•259 •256	•328 •356	•387 •453	•387 •443
• 443 • 498	217	148	090	~+034	.018	.127	+228	•320	.415	.498
•553 •609	248 175	169 124	107 081	057 043	012 007	.083 .065	•164 •120	•247 •178	.333	•553 •409
.664	074	055	035	016	.004	.044	•052	•073	.120	. 664
•719 •774	015 .007	008 .012	.000	•008 •022	•019 •029	.041 .049	009 015	082 114	105 214	•719 •774
.830	•012	.017	.020	•022	•026	.039	005	072	200	.830
.871	014	013	016	015	014	011	048	104	184	.871
				r= 0.940	; q = 743	1b/sq f	t			
•166 •277	.013	.023	.033	.041	•054	•071	.088	•100	•109	•166 •277
• 367	.051	•070	.087	-108	•133	•176	•227	•272	•313 •413	•367 •387
• 387 • 443	055 208	015 148	092	+065 034	•109 •028	•190 •148	•275 •266	•348 •373	•476	.443
498	212	147	098	046	•014 -•027	•124 •071	•234 •167	•336 •262	•437 •354	.498 .553
•553 •609	250 312	208 241	157 106	084 063	027	-046	•120	.195	.276	.609
.664	142	049	039 .003	024 .013	014 -017	-005	-043	.091 087	•152 -•071	.719
.719 .774	•002 •014	000	.018	•026	•040	•039	041	191	222	.774
.830 .871	.012 013	-016	-018	-023	010	-041 -014	031 070	160 153	269 406	.830 .871
.0/1	-,013	-6026	017		-1010	-0014				
	لـــــا			м = 0.98	0: q = T	1 1b/sa	ſt.			
.166	.019	.033	.043	•052	•062	•079	.099			.166
.277										•277
•367 •387	.084 018	•102 •021	•119 •058	•137 •095	•156 •133	•199 •215	• 253 • 302			.367
. 443	175	122	068 073	014 027	.043 .021	.165 .136	.288 .254			. 443 . 498
.498 .553	192 233	130 183	140		048	•072	.182			.553
•609	301	245	195	141	066 071	•041 -•011	•136 •056			•609 •664
•664 •719	320 093	047	207 028	150 028	071	121	107			.719
•774	.020 .027	.040 .042		•034 •044	•015 •039	070 .006	090 070			•774 •830
.830 .871	.008			.004	.001	026	143			.871

TABLE VI. - PRESSURE COEFFICIENTS AT STAGNAT ON PRESSURE OF 1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(d) Station D - Concluded

x/l	a = -4º	a = -2º	a = 0°	a = 2º	a = 40	a = 8°	a = 12º	a = 16°	a = 20°	x/1					
		- "	м	= 1.030;	q = 803	lb/sq ft									
				.093	.102	.114	•127			. 166					
. 166	-061	•072	.086	•073	•102	• • • • •	•		1 1	.277					
• 277 • 367	.138	.137	.146	.162	.186	.249	.303		1	.367					
387	.048	.073	.105	.139	•178	.267	.353		1	.387					
.443	102	067	015	•032	•091	.215	.337		1	.498					
.498	124	082	030	•024	•076 •001	•186 •120	230		1	.553					
.553	169	136	093 143	050	025	.090	187		1 .	.609					
•609	226 254	189 200	-, 158	098	048	.046	. 115			-664					
.664 .719	140	107	091	075	063	046	360		!	.719					
.774	060	045	021	033	041	075	384			•774					
830	044	038	025	028	034	054	075			.830					
.871	073	084	085	-•099	116	156	196								
								L	<u>l</u>	i					
	M = 1.125; q = 856 lb/sq ft														
•166 •277	.025	•042	•055	•067	•076	.085	•098			.164 .277					
.367	.008	.006	.003	006	022	056	075	1	i	.367					
.387	.027		•077	.102	•125	•189	.311 .342	l	i	.443					
.443	069			.049	•091 •089	.199 .196	318	l		498					
498	097			•039 -•010		125	257	İ	ĺ	.553					
.553	131			052		.115	, 235	1	1	-609					
.609	193									+ 664					
.719	116		079							.719					
.774	045	034				~-033			1	830					
. 830	020								1	.67					
.871	057	064	079	083	070	,	- 120								
	<u></u>	L)	(= 1.200); q = 88	8 1b/sq :	<u> </u>	L	<u> </u>	1					
.166	.042	.055	.067	•077	.083	•093	101			.16					
•277		٠.,.	019	022	029	044	057	4	1	. 34					
.367	006									.38					
. 387 . 443	059				•104	•209	-337		1	- 44					
498	076		.001	.05	•102				1	. 49					
. 553	109	060								.50					
.609	139						1		1						
.664							T		ł	71					
.719	119								1	.77					
.774			T	1					1	.83					
.830							164	4	1	.87					
							1								
	l	l	l	L	1	L		<u> </u>		<u> </u>					

TABLE VI. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Continued

(e) Station B

				(e) 5	tation 5					
x/1	a = -4°	a = -2º	a = 00	a = 2º	a = 40	a = 8°	a = 12º	a = 16°	a = 500	x /2
			M	1 = 0.800	; q = 627	7 lb/sq f	t			
•055	•027	.045	.065	.088	111					
+166					•113	•175	.248	•321	•406	.055
•277 •367	023	016 .029	004	•009 •102	•025 •138	.074 .225	•140 •317	•210	•294	•166 •277
.387	084		013	.022	•055	138	232	.399 .319	•490 •414	•347 •387
.443 .498	175		070	025	•020	•120	•222	•305	•397	.443
.553	187 164		080 069	035 028	•007 •011	•104	•195 •174	•273 •236	•356 •304	•498 •553
•609	118	084	049	019	•011	.079	•135	.178	.228	•609
•664	046 027	026	003 011	*016 001	+036 +006	.082 .031	•112 •034	•122 •007	•142 -•031	-664
•774	•002	.005	.010	.013	-017	.032	026	008	070	.719 .774
.830	-007 -017	•007	•009	•010	•011	•020	.016	•000	043	.830
•871 •954	-017	018 .057	022 .055	027 -051	032 .047	036	046	062 -039	100 .024	.871
	·	.				1	l		0020	4,54
				M = 0.900	; q = 71	3 1b/sq 1	řt			
.055 .166	•031	•049	.069	•094	•121	.183	•256	.335	•422	.055 .166
•277	023 .029	019 .053	012 .080	.003	•021	•072	+139	•218	•308	•277
.387	062	034	004	•115 •030	•152 •066	•237 •151	•332 •247	•420 •941	•516 •441	•347 •387
+443	191 225	134	084	033	•017	•125	•232	•327	•427	.443
• 498 • 553	257	160 169	104 106	052 054	002 005	•103 •091	•201 •173	•292 •250	.384 .334	.498 .553
•609	170	118	076	037	001	•073	.130	•191	-263	.609
•664 •719	056	036 021	013	-010 -002	.033 .010	-080	.099	.125	-178	-664
.774	.002	.004	.008	•014	•021	•035 •040	-001 -013	045	035 153	•719 •774
.830	022	•003	.005	•007	•013	•027	012	048	158	.830
.871 .954	-022	024 -058	027 .056	~•031 •053	-•032 •051	034 -048	070 .034	122 .024	195 012	•871 •954
		L								V
			м	= 0.940	q = 743	lb/sq f	t			
•055 •166	•034	•052	•073	•094	•126	•187	•262	.343	-437	.055 .366
•277	023	022	015	004	•019	•070	.142	.225	•320	.277
• 367 • 387	-036 -039	-073	.095 .006	•124 •037	•163 •077	•245	•342 •259	• 437	•536	•367
+443	180	134	086	038	•019	•160 •129	.242	•359 •340	•463 •451	•387 •443
.498	225	163	118	066	008	•101	•208	•307	.409	.498
+553 +609	258 300	210 237	150 105	084	022 017	.080 .055	•178 •132	•268 •206	•359 •288	•553 •609
.664	135	031	017	.001	.018	+048	.091	.143	•207	.664
•719 •774	007 -009	013 .006	009 -010	•001 •017	.008 .031	005 .029	027	039 151	002 151	.719
-830	•003	•002	.004	•008	•020	•026	039	154	189	•774 •830
•871 •954	024 .061	026 .059	030 .058	-•033 •055	030 .055	037 .047	091	176	370	.871
			4378	4099	1423	-047	.034	.012	023	.954
<u> </u>			М	= 0.9 8 0	q = 771	lb/sq f	t		1	
.055 .166	e048	.067	.089	•112	•138	•200	•277			•055 •166
•277	016	016	008	•004	•022	•075	•155			•277
•367 •387	+096 -+002	•110 •017	.040	•156 •067	•186 •099	•266 •181	•365 •285			•347 •367
.443	~.149	106	062	016	•033	• 145	• 265			.443
.498 .553	205 235	151 184	096 138	050 096	002 042	.111 .081	•229 •105			.498
+609	287	237	189	138	042	•048	•195 •147			• 553
+664 +719	285	228 058	174	117	034	•032	·103			.664
•719 •774	110 .022	058 -037	032 -038	028 .024	071 .006	103 082	070 090	l		•719 •774
.830	.024	•032	.033	•029	•023	006	057			.830
+871 +954	•002 •081	•002 •079	004	014 .071	020 .068	049 -062	169 .028			.871 .954
									i	

TABLE VI. - PRESSURE COEFFICIENTS AT STAGNATION PRESSURE OF

1.0 ATMOSPHERE FOR BODY IN PRESENCE OF WING - Concluded

(e) Station E - Concluded

M = 1.030; q = 803 lb/sq ft	x/1	a = -4°	a = -2°	a = 0°	a = 2º	a = 40	a = 8°	a = 120	a = 16°	a = 20°	x/2				
**************************************		<u> </u>	u2		<u> </u>				G - 20	- 20	-/.				
186				M	= 1.030;	q = 803	lb/sq ft								
1.125; q = 856 lb/sq rt	.055	.093	.106	.128	.250	•177	.239	.315			•055				
1967 1978 147 156 175 1210 1314 141	. 166									l I	. 166				
**************************************											.277				
**************************************											.387				
**************************************											.443				
1.125; q = 856 10/8											.498				
0.09							.129	.244		i 1	. 553				
*719							.098			1	•609				
**************************************	. 664	220								i I	.664				
**************************************											.719				
### 1.125; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft ### 1.126; q = 856 lb/sq ft #### 1.126; q = 856 lb/sq ft #### 1.126; q = 856 lb/sq ft #### 1.126; q = 856 lb/sq ft #### 1.126; q = 856 lb/sq ft #### 1.126; q = 856 lb/sq ft #### 1.126; q = 856 lb/sq ft ##### 1.126; q = 856 lb/sq ft ###################################										1 1	.774				
## 1.125; q = 876 lb/sq ft ##										1	.871				
M = 1.125; q = 856 lb/sq rt 1055										1	.954				
**************************************	• 774	040	033	033	0//	•••									
1866				м	- 1.125;	q = 856	lb/sq ft								
1866															
**************************************		.062	•083	••••	• • • • •	• • • • •		,	1		.166				
*367 *002 *007 *014 *028 *041 *078 *139 *210 *387 *019 *024 *027 *030 *032 *046 *210 *210 *244 *270 *000 *040 *080 *181 *315 *276 *279 *279 *279 *279 *279 *279 *279 *279		003	-002	-012	.027	-041	.075	.126	l		.277				
**************************************							.078	.139	1	1 1	.367				
**************************************							.046	.210			.387				
### 1.200; q = 888 lb/sq ft ### 1.200; q = 888 lb/sq ft ### 1.200; q = 888 lb/sq ft #### 1.200; q = 888 lb/sq ft #### 1.200; q = 888 lb/sq ft #### 1.200; q = 888 lb/sq ft #### 1.200; q = 888 lb/sq ft ##### 1.200; q = 888 lb/sq ft ###################################				.000	.040	•080			ŀ		. 445				
### 1.200; q = 888 lb/sq ft ### 1.200; q = 888 lb/sq ft ### 1.200; q = 888 lb/sq ft #### 1.200; q = 888 lb/sq ft #### 1.200; q = 888 lb/sq ft #### 1.200; q = 888 lb/sq ft #### 1.200; q = 888 lb/sq ft ##### 1.200; q = 888 lb/sq ft ###################################		098							l		.498				
### ### ### ### #### #### #### #### ####									İ		.553				
*719											.609				
**************************************									ŀ	1 1	719				
#830									ļ		774				
#871									!		.830				
M = 1.200; q = 888 lb/sq ft M = 1.200; q = 888 lb/sq ft 055									l		.871				
**************************************								077	1		. 954				
**************************************		<u> </u>	<u> </u>	<u> </u>	1 200	- 999	1h/ss #	L	L	<u>. </u>					
*186 277		1 070			r		 _		1	Τ	•055				
277 009 016 024 034 048 089 140 387 009 015 021 036 057 099 150 387 009 009 010 007 010 039 085 443 -035 -009 019 050 093 191 314 498 -081 -043 -003 040 087 190 308 553 -100 -063 -022 020 066 167 280 669 -133 -2107 -071 -027 023 124 233 664 -166 -105 -058 -007 040 136 239 719 -167 -134 -101 -067 -031 044 124 774 -061 -059 -053 -013 -017 0013 830 -016 -017 -013 -011 -007 006		1 ****	****	****	•***	• • • • •		1,500	ì		.166				
**************************************		.009	.014	.024	.034	.048	.029	.140			.277				
**************************************											-367				
**************************************					•007	•010			l		.387				
-553100063022 -020 -066 -167 -280 -609133107071027 -023 -124 -233 -664146105058007 -040 -136 -239 -719167134101067031 -044 -124 -774061061059053043017 -013 -830016017013011007 -006 -013	.443										.443				
**************************************											.498				
**************************************											.553				
•719 -•167 -•134 -•101 -•067 -•031 •044 •124 •774 -•061 -•061 -•059 -•053 -•043 -•017 •013 •830 -•016 -•017 -•013 -•011 -•007 •006 •013											.664				
•774061061059053043017 -013 •830016017013011007 -006 -013											.719				
.830016017013011007 .006 .013											.774				
											.830				
	.871	067						121			.871				
								088		1	. 954				

TABLE VII.- WING SECTION DATA

		<u>у</u> ъ/2	0.12				y b/2	0.25					y b/2	0.40		
deg	е	n	('n		Ya, leg	c	n	c	n.		a, eg	c	n	c	m
	0.5 stm	1.0 atm	0.5 ntm	1.0 atm	0.5 Ate	1.0 sta	0.5 ntm	1.0 atm	0.5 atm	1.0 ntm	0.5 ntm	1.0 atm	0.5 atza	1.0 atm	0.5 atm	1.0 atm
-4 -2 0 2 4 8 12 16	-0.2066 0946 .0221 .1276 .2459 .4710 .6776	0879 .0258 .1338 .2430 .4733 .6881	0056 0186 0302 0433 0661 0850	0046	.01 0 01 02 05 06 06	0.05 .05 01 05 05 09 11 12	-0.2268 0989 .0366 .1544 .2858 .5379 .7886 1.1074	0874 .0398 .1600 .2836 .5446 .7900	-0.0076 0149 0214 0285 0364 0481 0661 1423	-0.0069 0136 0215 0287 0358 0449 0604 1279	0.06 .04 0 03 06 12 14 15	0.13 .08 0 07 13 24 28	-0.2825 1271 .0263 .1613 .3167 .6183 1.0187 1.0446	-0.2828 1183 .0310 .1714 .3114 .6338 1.0301		-0.0257 0249 0292 0350 0363 0389 1391 1821
20	1.1304	1.1340	11572	1480	07	13	1.1800	1.1670 M = 0.	1968	1920	17	33	1.0240	1.0222	1879	1865
-4 -2 0 2 4 8 12 16 20	-0.2282 1039 .0256 .1458 .2705 .5270 .7246 .9371 1.1366	-0.2252 0.748 .0275 .1486 .2682 .5224 .7287 .9257 1.1361	0032 0217 0393 0581 1050 1195 1534	0041 0212 0377 0559 1014 1170 1504	03	0.06 .05 01 03 06 12 14 14	-0.2579 1065 .0590 .1768 .5153 .6030 .8322 1.1119 1.1865	r	-0.0003 0136 0248 0580 0504 0890 1056 1706	0128	0.09 .05 0 05 09 16 17 19	0.17 .10 01 09 17 33 34 37	-0.3279 1388 .0294 .1876 .3513 .6831 1.0447 1.0313	-0.3134 1237 .0335 .1898 .3454 .6849 1.0574 1.0236	-0.0133 0231 0326 0415 0495 0737 1657 1993 2068	-0.0210 0253 0329 0404 0478 0653 1612 1942 2034
	т	r	,	1		ı		M = 0.9								
-4 -2 0 2 4 8 12 16	-0.2479 1200 .0276 .1536 .2907 .5324 .7318 .9284 1.1483	-0.2491 1013 .0302 .1643 .2951 .5405 .7432 .9269 1.1497	0076	0.0341 0005 0241 0521 0818 1278 1437 1587 1940	0.00	0.07 .04 01 04 08 14 15 16	-0.2674 1302 .0435 .1798 .3352 .5919 .8216 1.1347 1.2858	-0.2689 1041 .0440 .1920 .3361 .6090 .8732 1.1301 1.2659	0.0117 0074 0285 0472 0693 0988 1221 1701 2250	0.0102 0089 0276 0481 0680 1006 1168 1560 2229	0.09 .07 0 05 10 19 19 21	0.20 .12 01 11 21 38 39 42 47	-0.3333 1691 .0360 .2000 .3818 .6870 1.0207 1.0804 1.1590	-0.3411 1359 .0338 .2106 .3808 .7000 1.0641 1.0666 1.1599	0.0033 0182 0356 0528 0739 1011 1685 2073 2308	-0.0021 0230 0364 0534 0734 0965 1678 2022 2287
			· · · · · · · · · · · · · · · · · · ·	·				M = 0.9	80							
-4 0 2 4 8 12 16 20	-0.2365 1066 .0189 .1339 .2615 .5039 .7341 .9383 1.1325	-0.2275 0093 .0211 .1380 .2631 .5021 .7362	0215	0.0312 .0030 0215 0450 0731 1170 1560	0.04 .02 0 02 04 08 09 10	0.08 .04 01 04 09 16 20	-0.2703 1142 .0349 .1697 .3187 .5876 .8416 1.0829 1.2997	-0.2632 1038 .0342 .1737 .3196 .5855 .8818	0.0237 0049 0291 0521 0770 1105 1456 1557 2042	0.0216 0052 0274 0510 0758 1089 1406	0.12 .07 0 06 13 23 24 26	0.25 .11 0 11 24 44	-0.3335 1495 .0334 .1895 .3685 .6780 .9915 1.3547 1.3431	-0.3253 1325 .0287 .1936 .3640 .6784 1.0182	0.0187 0136 0427 0666 0905 1165 1692 2582 2598	0.0135 0168 0132 0656 0875 1133 1693
								M = 1.0	30						.	
-2 0 2 4 8 12 16 20	-0.2132 1097 .0169 .1234 .2427 .4728 .7067 .9371 1.1422	-0.2116 0990 .0198 .1321 .2428 .4743 .7022	.0059 0204 0413 0665 1116	0.0269 .0033 0204 0437 0654 1109 1497	0.04 .02 0 02 04 08 11 12 12	0.09 .04 01 05 08 16 21	-0.2376 1209 .0509 .1592 .2982 .5565 .8401 1.1066 1.2849			0.0173 0051 0274 0506 0699 1078 1377	0.12 .07 0 06 12 22 29 31 32	0.24 .12 01 13 23 43 59	-0.2871 1503 .0271 .1767 .3449 .6412 .9279 1.3614 1.4526	.6500	0.0104 0138 0414 0644 0875 1165 1602 2914 2948	0.0095 0185 0429 0659 0845 1147 1508
2024826	0.2012 - 0967 - 0148 - 1150 - 2255 - 4408 - 6594 - 8990 1.0810	-0.1861 0687 .0204 .1268 .2273 .4422 .6605	0.0241 .0031 0194 0391 0612 1035 1428 1819 2101	0026 0208	0.04 .02 0 02 04 08 11 12 12	0.08 .03 01 05 08 16 22	-0.2254 1042 .0254 .1435 .2748 .5280 .7692 1.0507 1.2052	0735 .0354 .1600 .2761 .5357 .7736	0.0181 0035 0244 0440 0669 1049 1424 1894 1932	0100 0266	0.12 .07 0 06 11 22 30 31	.10 01 12 22 43 59	-0.2713 1349 .0258 .1620 .3220 .6178 .8921 1.2532 1.3606	0919	0.0117 0167 0416 0639 0868 1220 1546 2651 2770	0.0044 0257 0450 0665 0866 1213 1551
2024826	0.1923 0906 .0081 .1013 .2003 .4045 .6195 .8195 1.0172	-0.1850 0807 .0150 .1074 .2077 .4122 .6275	0.0256 .0022 0156 0320 0516 0924 1353 1720 2062	0.0219 .0007 0162 0339 0534 0924 1342	0.04 .02 0 02 04 07 11 15 15	0.08 .04 0 04 08 15 21	-0.2131 0975 .0210 .1338 .2535 .4941 .7209 .9455 1.1735		0.0147 0048 0246 0430 0636 1007	0069 0254 0454 0661 1009 1379	0.12 .07 .01 05 11 21 29 35 36	.13 .01 11 21 41 58	-0.2582 - 1311 .0104 .1448 .2856 .5667 .8460 1.0588 1.2701	1136 .0209 .1574 .2930 .5733 .8588	0166 0371 0566 0765 1162	0.0031 0204 0400 0593 0783 1153 1567

TABLE VII. - WING SECTION DATA - Concluded

	·		$\frac{b/2}{b} = 0$.60					$\frac{p/5}{\lambda} = 0$.80					$\frac{y}{b/2} = 0.$	95)		
deg	Δα, deg		e _n		e _n		- ∆a, deg		e _n		c _m		Δα., deg		e _n		c _m	
	0.5 atm 1	.0 a.tm	0.5 atm 1	.0 atm 0	.5 atm 1.	O atm 0	.5 atm 1	.0 atm	o.5 aum]	.0 atm).5 atm 1) atm 0	5 atm 1	.0 atm	.5 stm 1.	0 atan 0.	5 atm 1.	O stm
-4 -2 0 2 4 8 12 16 20	0.17 .11 01 09 17 30 35 35	0.55 .21 02 19 34 60 71 76 86	-0.4023 - 1905 .0168 .1660 .5442 .7952 .8327 .8660 .8584	1855 .0188 .1759 .3329 .7876 .8327	0331 - 0322 - 0385 - 0416 - 0956 - 1448 -	0.0031 .0281 .0328 .0328 .0587 .0418 .0905 .1408 .1352 -1492	0.29 .18 04 17 29 48 57 65 72	0.60 .34 09 36 57 99 -1.14 -1.24 -1.42	M = 0.80 -0.4790 5851 0673 .1568 .3383 .5389 .5507 .5989 .6803		.0249 0485 0490 0513 0858 0931 1054	(.0787 .0055 .0518 .0498 .0498 .0866 .0910 .1012 .1202	72 81	.48		2776 1508 0586 2097 5407 5334 3774	.0087 0462 0355 0350 0340 0425	.0294 0397 0374 0334 0394 0465 0516
	[1		I.		'	,		м = 0.9 г г			1	1	0.96	-0.2004 -	0.1966	0.0045]-	0.0057
-4 -2 0 2 4 8 12 16 20	0.25 .15 01 15 25 42 45 50 56	0.45 .26 03 25 43 87 88 96	-0.4590 2105 .0187 .2014 .3979 .7828 .8256 .8647 .9506	1984 .0216 .1987	0320 0381 0440 0442 0573 1507 1597	0.0001 0275 0357 0428 0421 0457 1447 1512 1681	0.41 .27 06 25 38 70 73 85 93	0.78 .44 13 47 73 -1.42 -1.44 -1.57 -1.79	-0.5684 4353 0668 .1756 .3951 .8012 .5935 .6752 .7622	3691 0600 .1688 .3715 .8788 .5890 .6478 -7373	0.1023 .0548 0546 0568 0544 1256 1090 1245 1439	.0972 .0170 .0552 .0552 .0543 .1171 .1078 .1199 .1396	0.50 .36 15 37 50 92 93 -1.06 -1.21	53 71 97 -1.88 -1.86 -2.04 -2.33	2373	0865 1472 .0773 .2381 .4366 .3742	.0134 0428 0406 0271 0513 0486	.0313 0417 0396 0520 0572 0532 0563 0662
	T T			т.		1.111	1	i a et	M = 0.9	40 -0.5681	0.0873	0.1029	0.52	1.17	-0.2485	0.2439		0.0004
-4 -2 0 2 4 8 12 16 20	28 51 50 56	0.54 .52 04 50 55 -1.00 -1.10 -1.24	-0.4519 2576 .0252 .2103 .4277 .8160 .8776 .9198 1.0020	-0.4833 2128 .0248 .2213 .4326 .8295 .9013 .8977 .9712	0387 0483 0650 1178 1576 1761	0255 0383 0478 0643 0859 1554	0.42 .39 07 26 46 82 82 95 -1.07	0.94 -57 15 55 90 -1.63 -1.67 -1.83 -2.08	-,4910 -,0597 ,1835 ,4434 ,9120 ,6613 ,7478	- 4154 - 0602 - 1947 - 4272 - 9169 - 6473 - 7214 - 8057	.0794 0555 0542 0593 1341 1221 1446	.0562 0555 0574 0593 1298 1248 1413 1585	.55 17 38 57 -1.04 -1.05 -1.21 -1.40	.81 36 80 -1.14 -2.11 -2.17 -2.38 -2.74	3095 1602 .0828 .3066 .3615 .4102 .4825 .5748	.0927 .2758 .4218	.0373 0406 0401 0170 0443 0546 0644 0825	.0347 0433 0410 0242 0533 0608 0623 0785
	1		1	1. 1					M = 0.	+ -			r = _= r		2162	-0.3397	0.0187	0.0360
-4 -2 0 2 4 8 12 16	.19 01 19 39 68 67 70	0.67 .26 04 35 75 -1.29 -1.44	-0.4971 2452 .0145 .2112 .4405 .8606 1.0689 1.0836	2205 .0118 .2122 .4145 .8314 1.1779	0.0434 0086 0472 0775 1089 1493 1965 2072 2256	0129 0459 0726 0945	0.58 .31 05 35 -1.25 -1.15 -1.20 -1.35	1.22 .28 13 63 -1.50 -2.55 -2.56	-0.6175 4576 0778 .2330 .4960 1.0161 .9065 .8696	0490 .2059 .4864 .9397 .8735	.0243 0634 1037 1452 2221	0.1202 0536 0601 0769 1528 1837 1701	0.75 .44 03 39 -1.13 -1.73 -1.53 -1.60 -1.79	1.65 .58 20 77 -2.30 -5.33 -5.49	-0.3163 3078 2262 .0070 .4124 .7699 .5892 .6289 .7157	2976 1969 .0440 .4039 .7850 .9278	.0432 .0265 .0320 1112 1071 0933 0980 1175	.0385 .0002 .0041 1216 1331 1163
	1	I	ι, .		1 !			,	M = 1.	-		1	1 000	1 1 60	-0.4222	-0.4083	0.0365	0.0408
1	2 .20 02 221 437 867 285	0.71 .50 07 44 70 -1.26 -1.68	-0.4244 2563 .0203 .2105 .4167 .8029 1.1583 1.1777 1.2535	.0225 .2166 .3992 .7824 1.1345	0136 0598		11 46 70 -1.25	1.26 .41 30 93 -1.36 -2.32 -3.02	4590 0831 .1820 .4312 .9191 1.1230 .9810 .9691	.1939 .398 .868 .1.101	.0309 70840 51138 21357 02040	2028	-1.05 -1.79	1.69 .49 75 -1.58 -2.06 -3.36 -4.35	3441 2460 .1147 .3136 .7645 .9718 .6970 .7569	3575 1823 .1216 .2902 .7427 1.0141	.0194 0521 1090 0993 1469 1552 1238 1345	.0173 0908 1100 1045 1491 1930
	1	1	1	1	1		0.66	1.30	M = 1	.125 1 -0.568	7 0.0802	0.0758	0.93	1.82	-0.5230	-0.5209	0.0623	
]	14 0.56 .2202 218 456 866 1288 1685 2088	0.71 .26 07 39 68 -1.28 -1.75	2050 .0060 .1726 .3716	01487 0 .0159 6 .1930 6 .3612 6 .7240 1 1.0366	1464	0236 0533 0796 1046 1356	.41 10 41 70 -1.23	36 85 -1.34 -2.40 -3.19	415 098 121 .382	8285 3090 6 .152 5 .350 7 .812 9 1.058	7 .0284 10690 271044 141555 271922	0337 0755 1045 1267 1937 22345	.59 29 76 -1.08 -1.76	.18 91 -1.57 -2.11 -3.46 -4.56	4825 1973 .0480 .2785 .6842 .9493 .7009	1595 .0435 .2513 .6359 .8926	1120	1315 1283 1143 1339 1725
-	4 0.55	0.72	2 -0.348	4 -0.355	0.0247	0.018	0.65		-0.510	0 -0.535				2.03	-0.6956	-0.6919	.040	.0248
	-2 .20 0 0 217 455 862 1287 16 -1.00 20 -1.01	02 03 66 -1.2) -1.70	183 2000 5 .168 6 .344 3 .680	8166° 4 .0146 8 .179; 4 .345 17 .671 17 .974	70250 80540 20818 41085 71491	050 055 061 105 141 195	305 357 867 1 -1.17	1; 7; -1.3; -2.3; -3.1	7130 7 .089 1 .31 ¹ 3 .72	07110 08 .09 05 .300 72 .711 06 .970 07	09055 31091 45121 23178	062 090 118 185 226	721 973 3 -1.07 3 -1.69	52 -1.47 -2.11 -3.38 -4.50	2346 .0124 .2482 .615	2549 .0273 2 .2337 3 .5631 4 .8296	0703 1306 1260	1253 1202 1279 1657

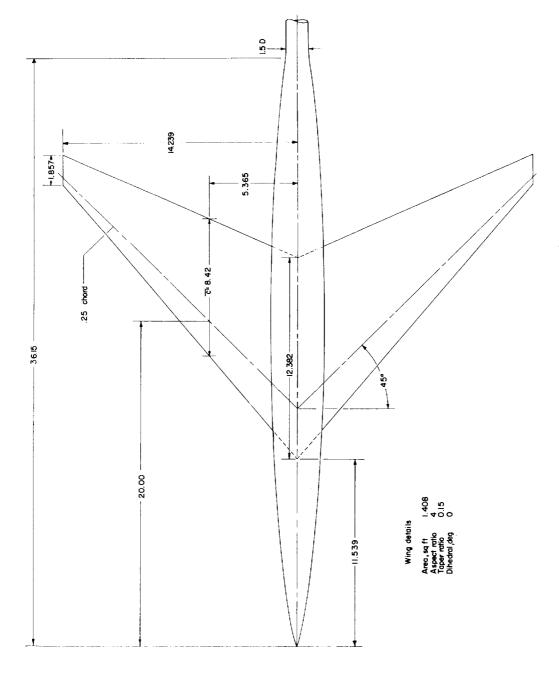


Figure 1.- Details of wing-body combination. (All dimensions in inches unless otherwise noted.)

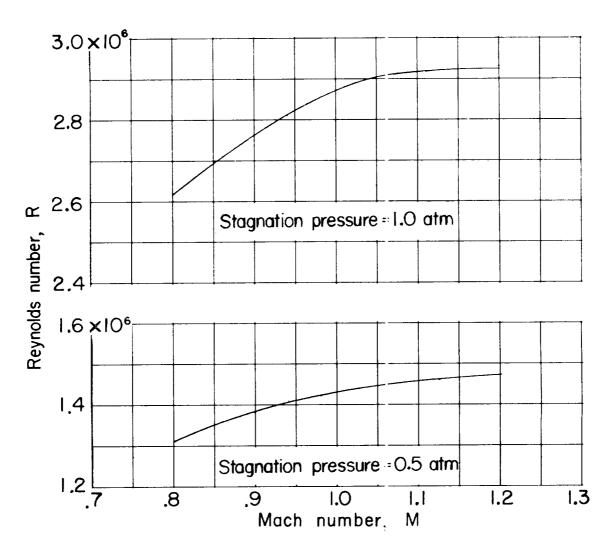


Figure 2.- Variation with Mach number of average Reynolds number based on wing mean aerodynamic chord.

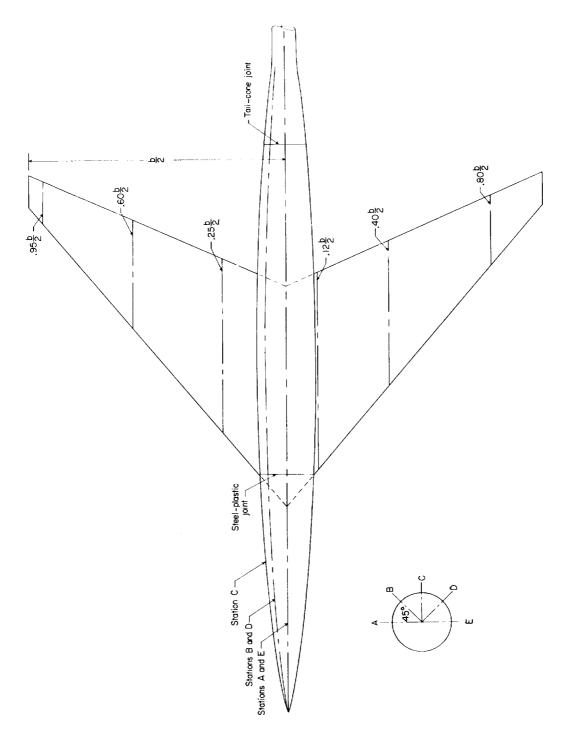


Figure 3.- A sketch of the location of pressure orifices on the wing and body.

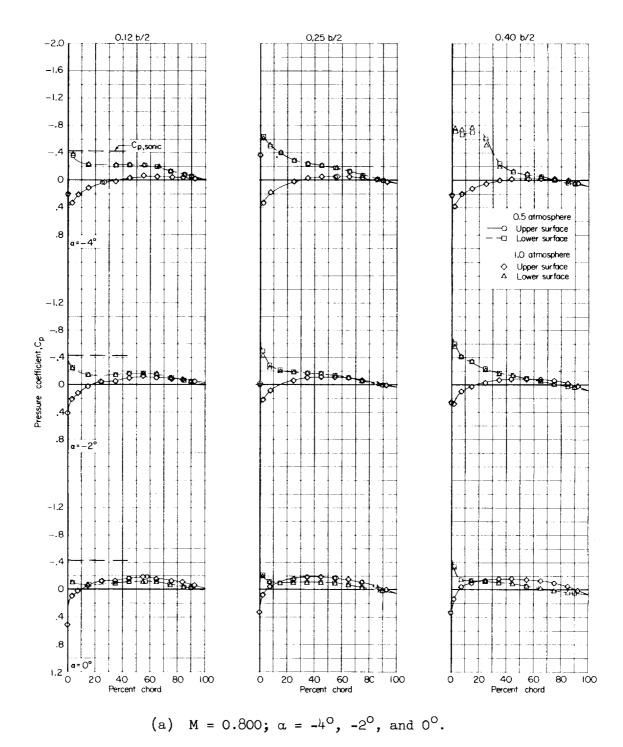


Figure 4.- Pressure measurements on the wing in the presence of the body.

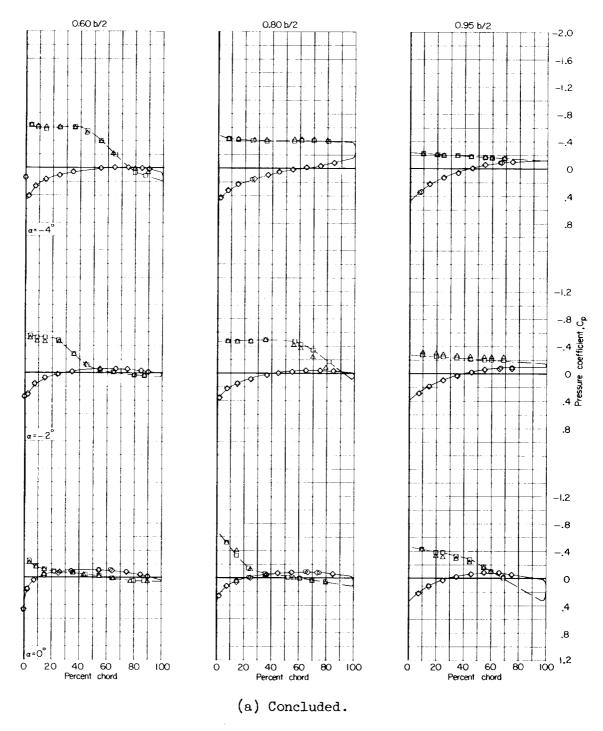
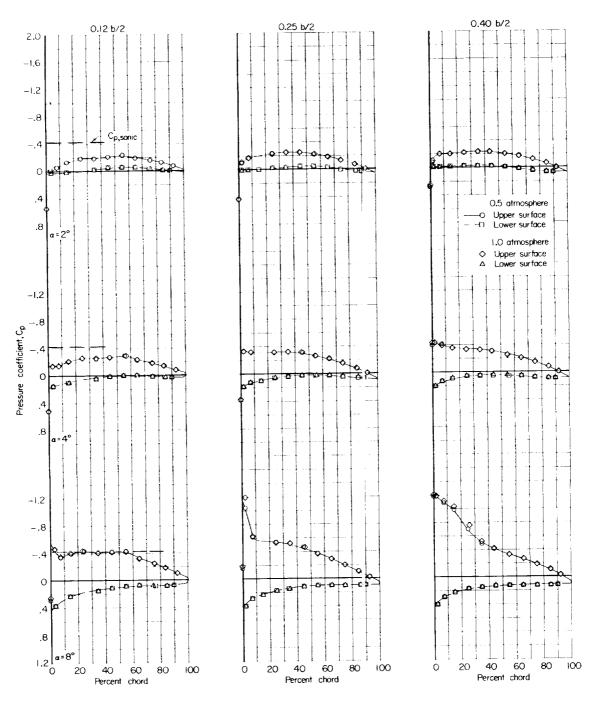


Figure 4.- Continued.



(b) M = 0.800; $\alpha = 2^{\circ}$, 4° , and 8° .

Figure 4.- Continued.

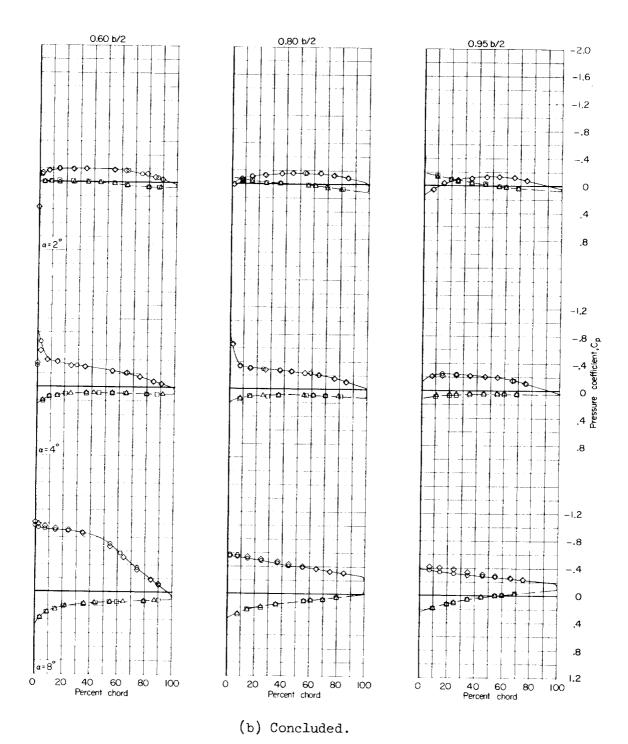
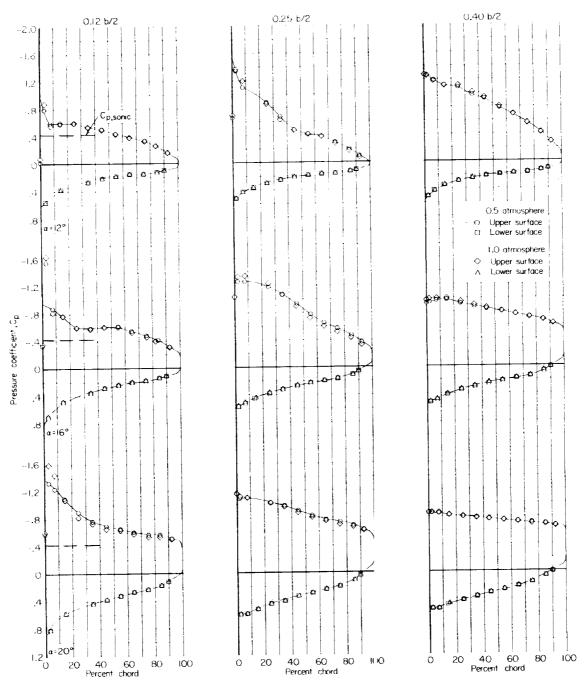


Figure 4.- Continued.



(c) M = 0.800; $\alpha = 12^{\circ}$, 16° , and 20° .

Figure 4.- Continued.

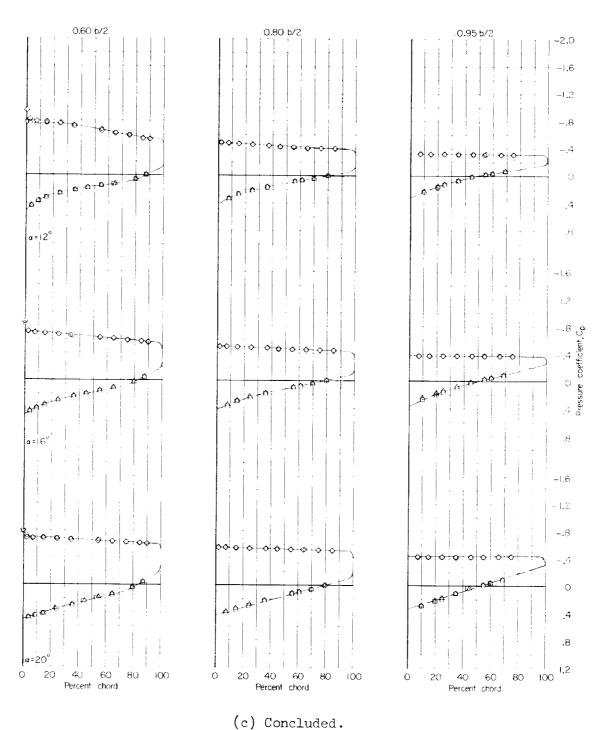
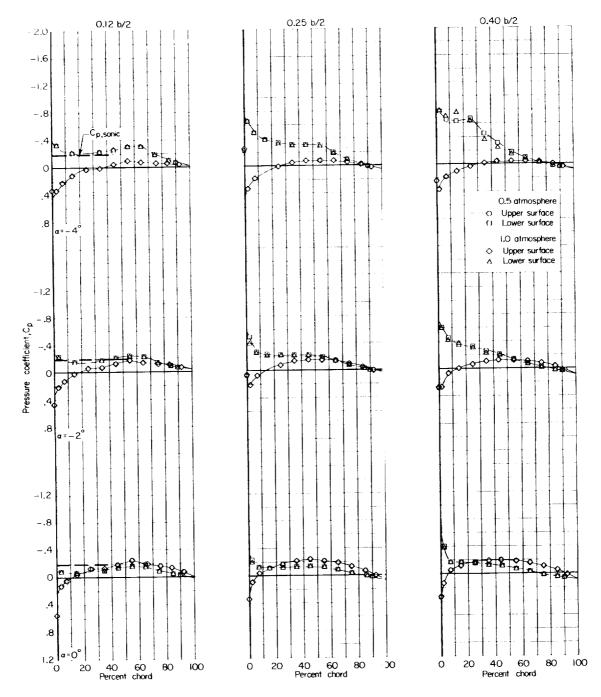
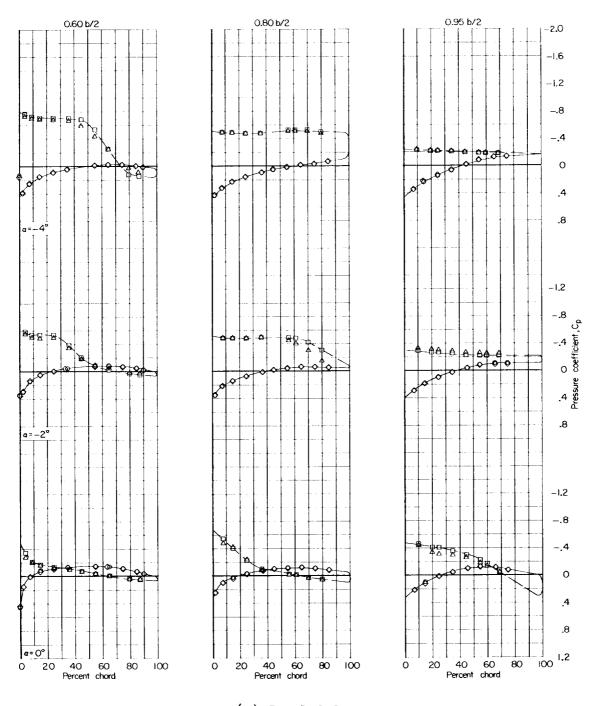


Figure 4.- Continued.



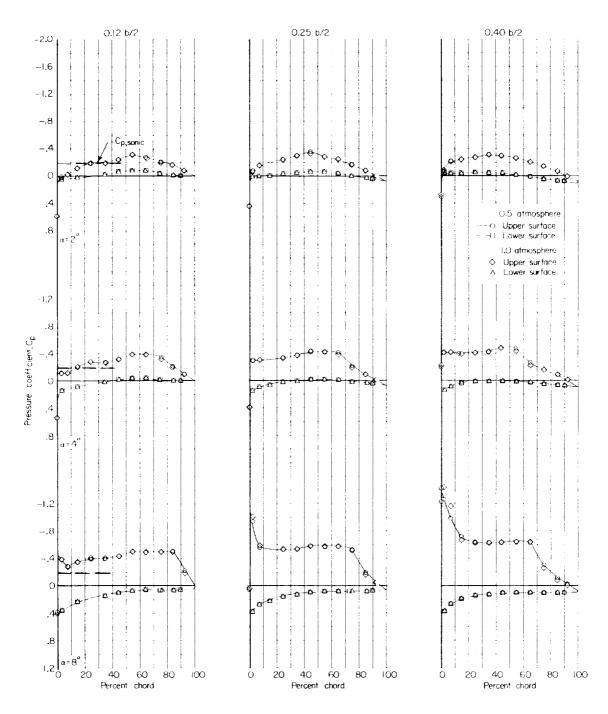
(d) M = 0.900; $\alpha = -4^{\circ}$, -2° , and 0° .

Figure 4.- Continuel.



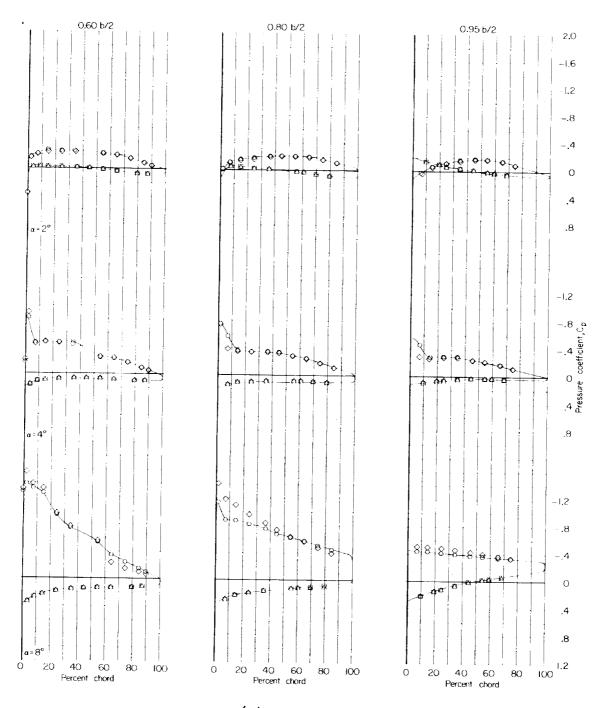
(d) Concluded.

Figure 4.- Continued.



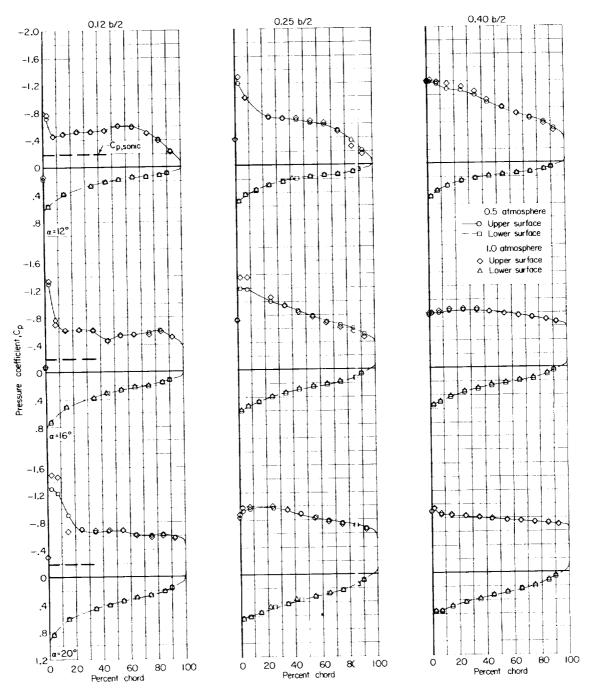
(e) M = 0.900; $\alpha = 2^{\circ}$, 4° , and 8° .

Figure 4.- Continued.



(e) Concluded.

Figure 4.- Continued.



(f) M = 0.900; $\alpha = 12^{\circ}$, 16° , and 20° . Figure 4.- Continued.

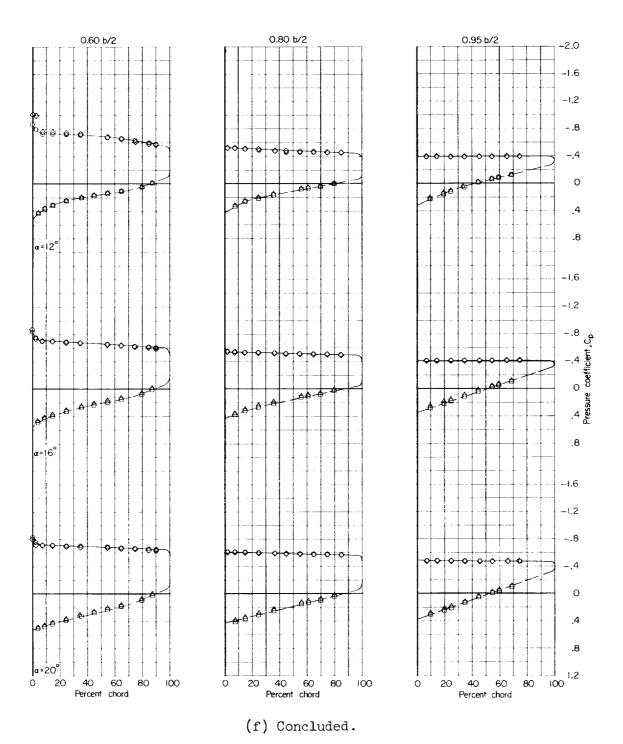
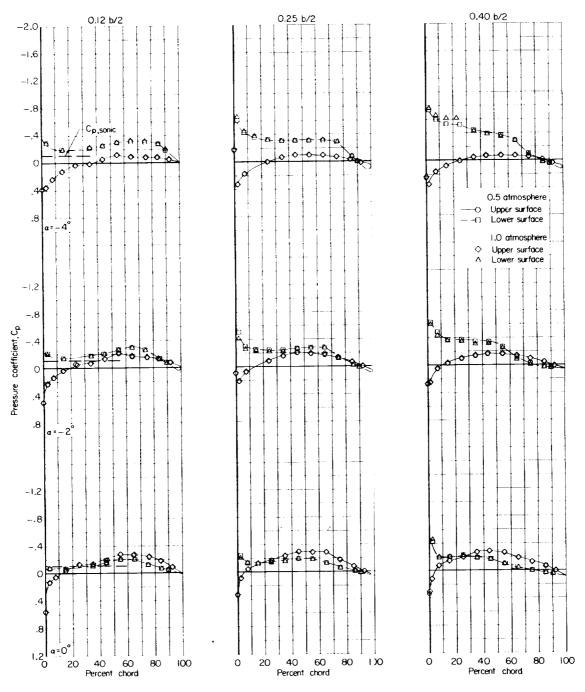
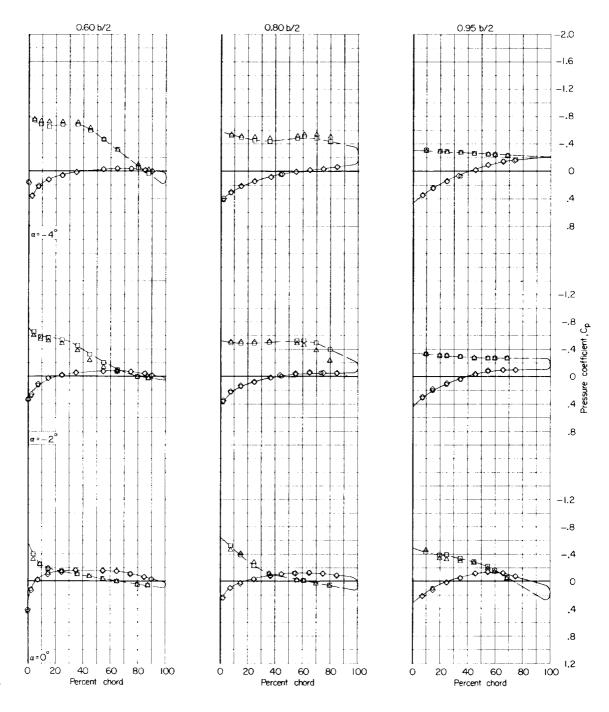


Figure 4.- Continued.



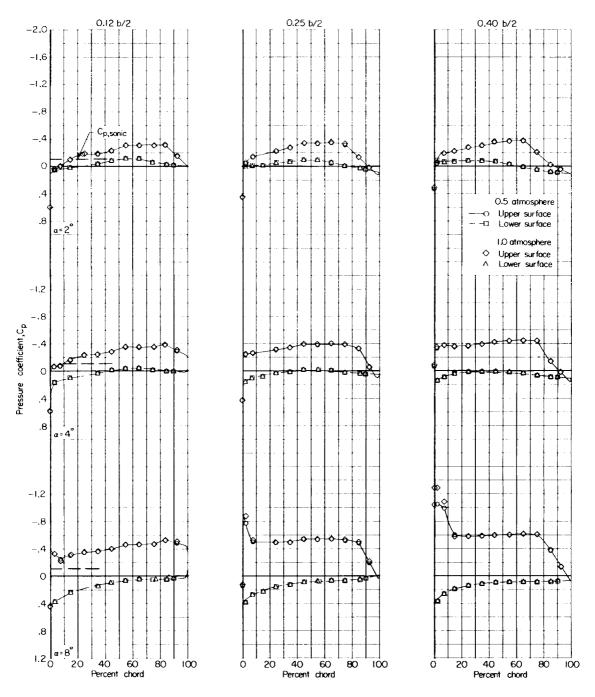
(g) M = 0.940; $\alpha = -4^{\circ}$, -2° , and 0° .

Figure 4.- Continued.



(g) Concluded.

Figure 4.- Continued.



(h) M = 0.940; $\alpha = 2^{\circ}$, 4° , and 8° .

Figure 4.- Continued.

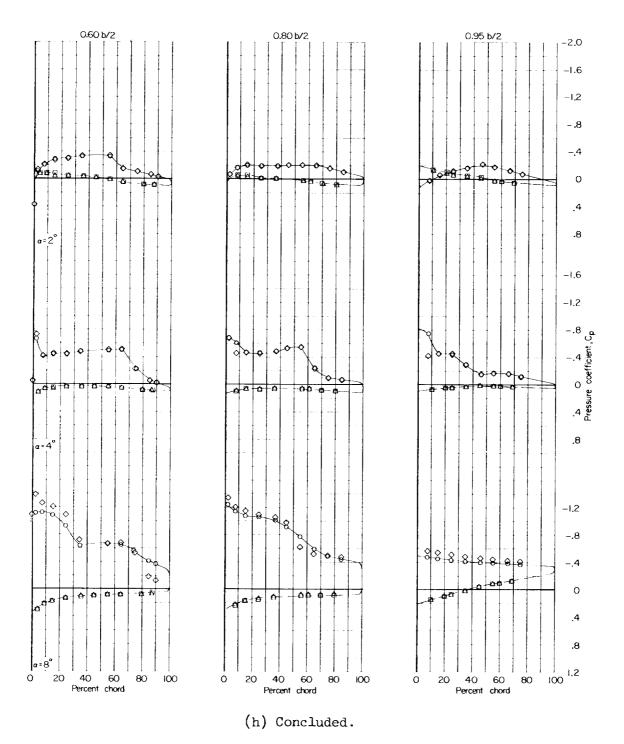
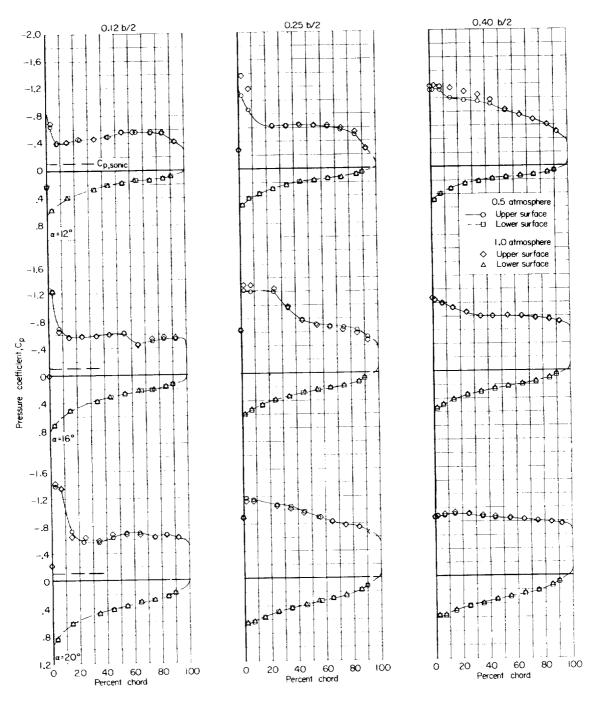


Figure 4.- Continued.



(i) M = 0.940; $\alpha = 12^{\circ}$, 16° , and 20° .

Figure 4.- Continued.

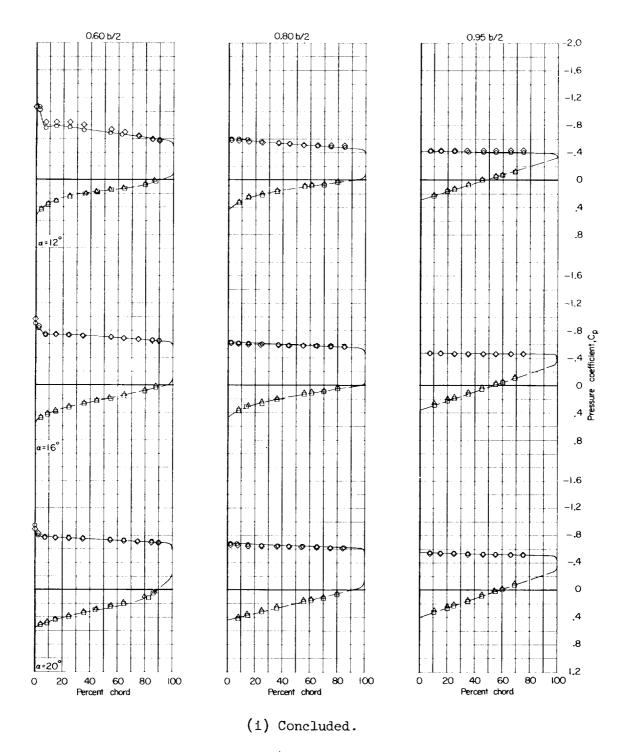
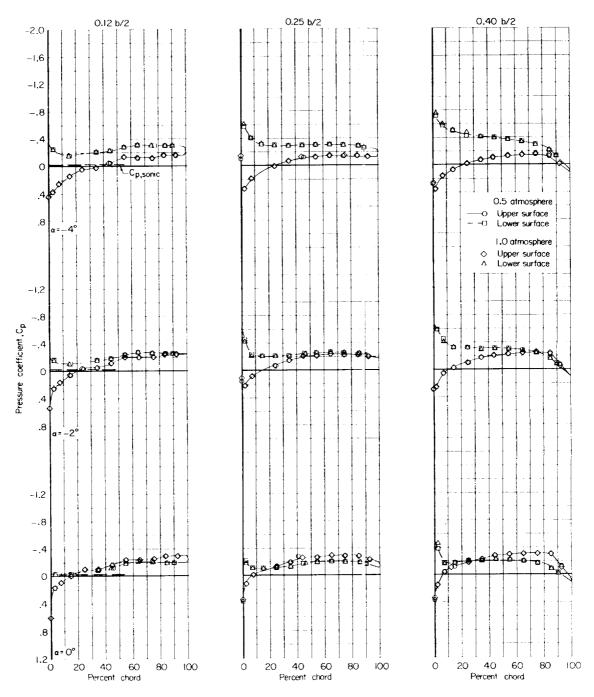
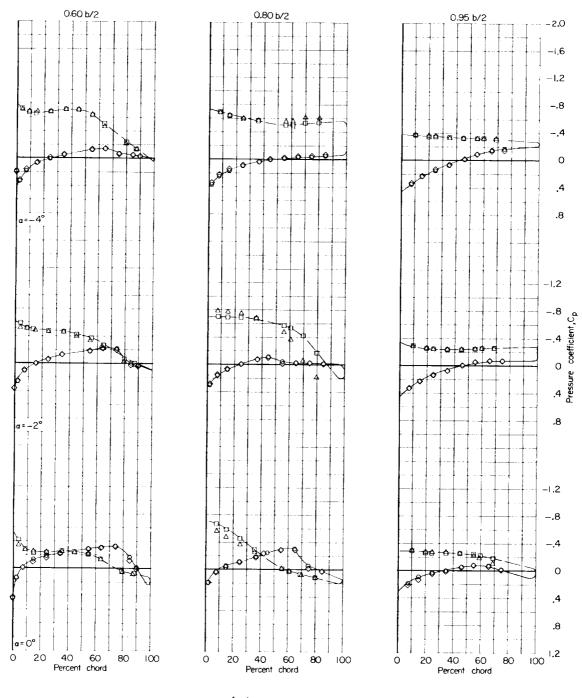


Figure 4.- Continued.



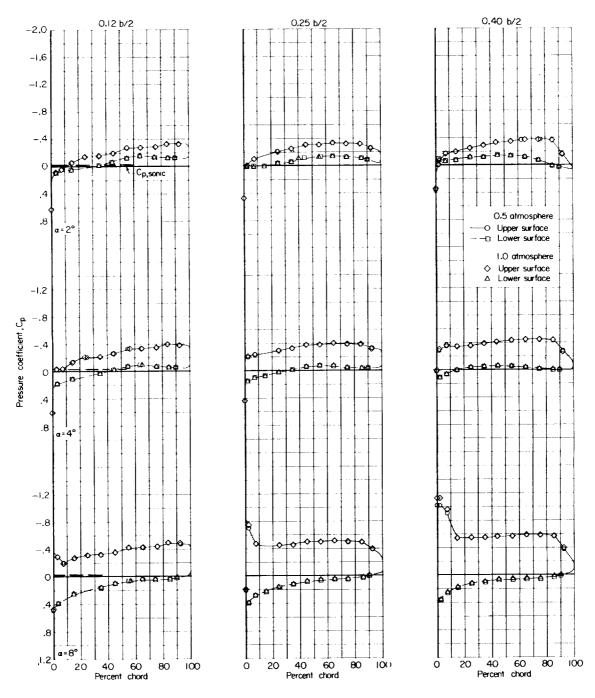
(j) M = 0.980; $\alpha = -4^{\circ}$, -2° , and 0° .

Figure 4.- Continued.



(j) Concluded.

Figure 4.- Continued.



(k) M = 0.980; $\alpha = 2^{\circ}$, 4° , and 8° .

Figure 4.- Continued.

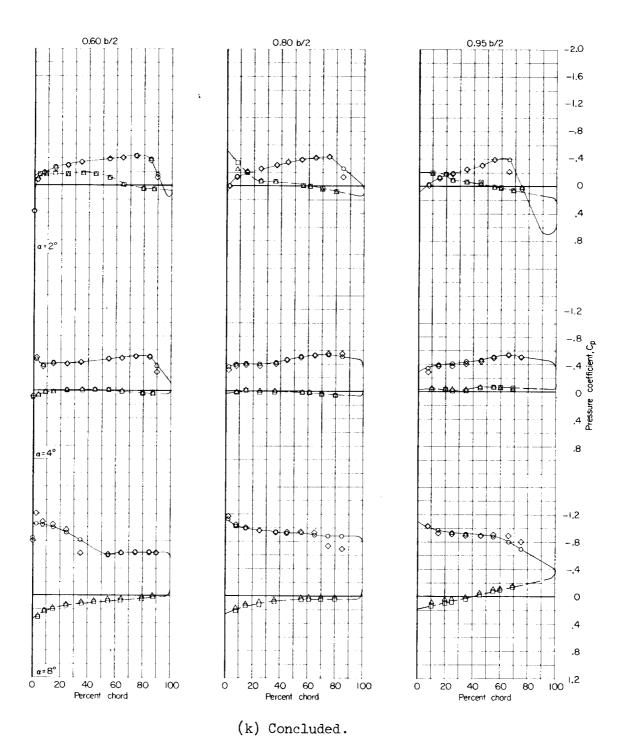
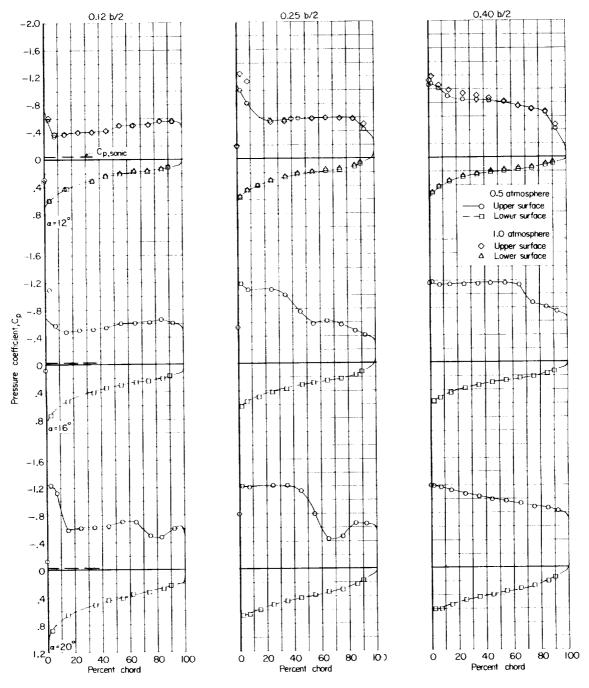
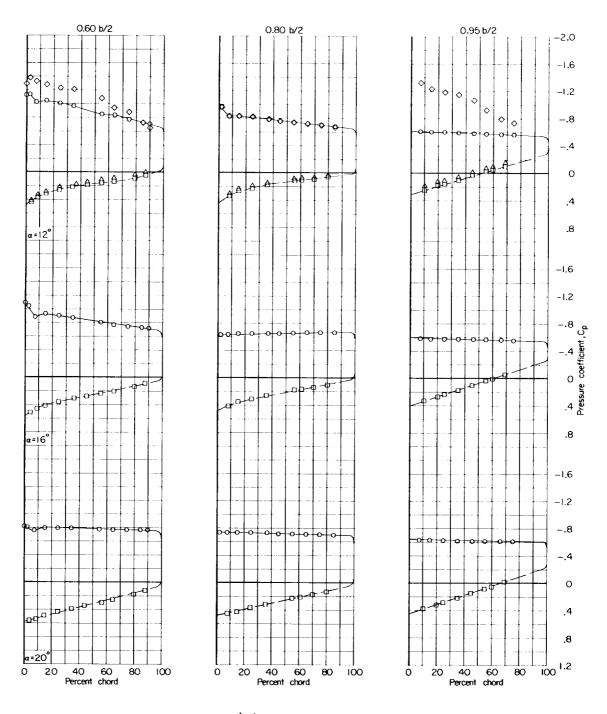


Figure 4.- Continued.



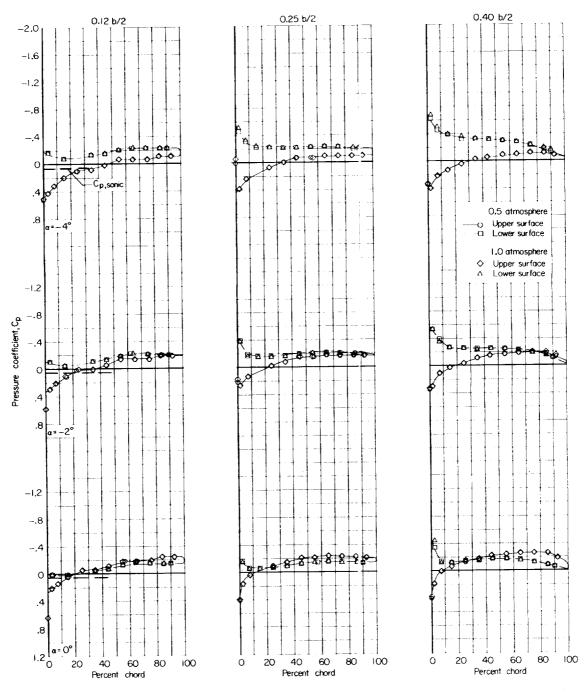
(1) M = 0.980; $\alpha = 12^{\circ}$, 16° , and 20° .

Figure 4.- Continued.



(1) Concluded.

Figure 4.- Continued.



(m) M = 1.030; $\alpha = -4^{\circ}$, -2° , and 0° .

Figure 4.- Continuel.

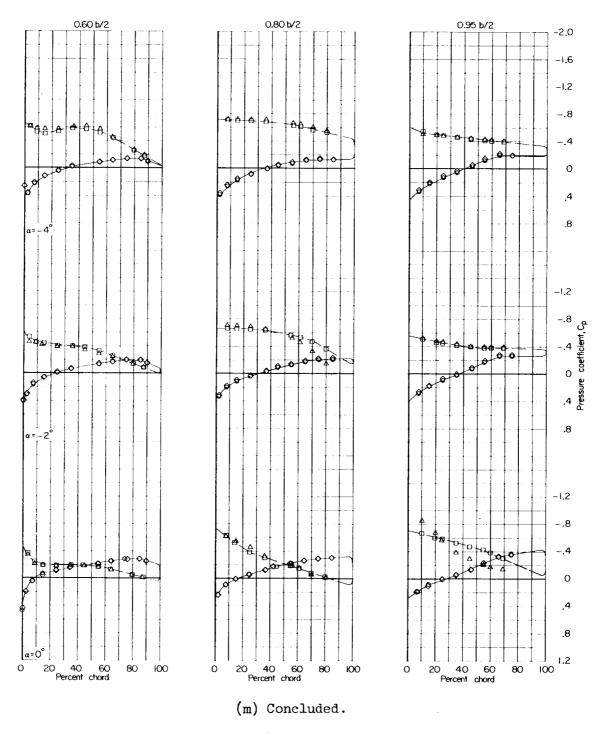
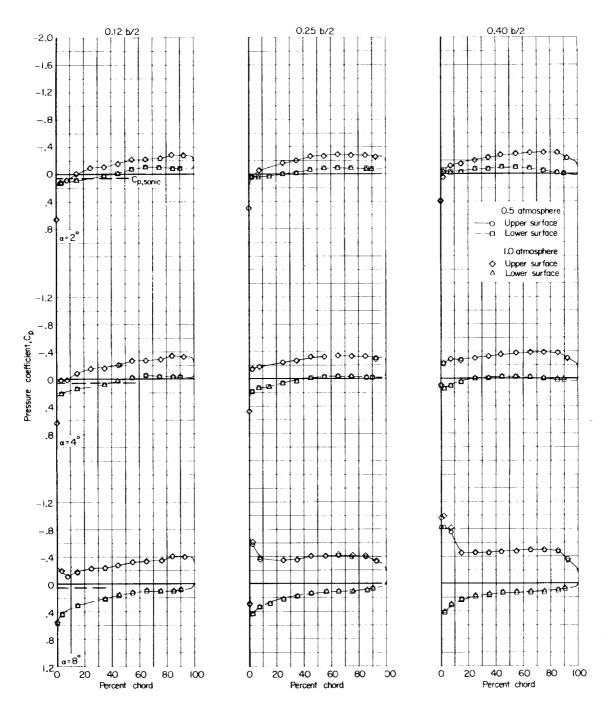


Figure 4.- Continued.



(n) M = 1.030; $\alpha = 2^{\circ}$, 4° , and 8° .

Figure 4.- Continued.

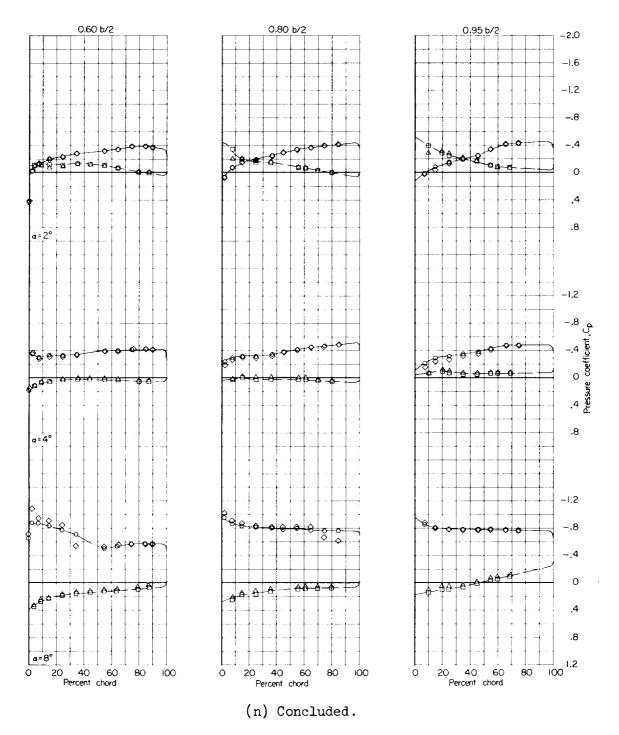
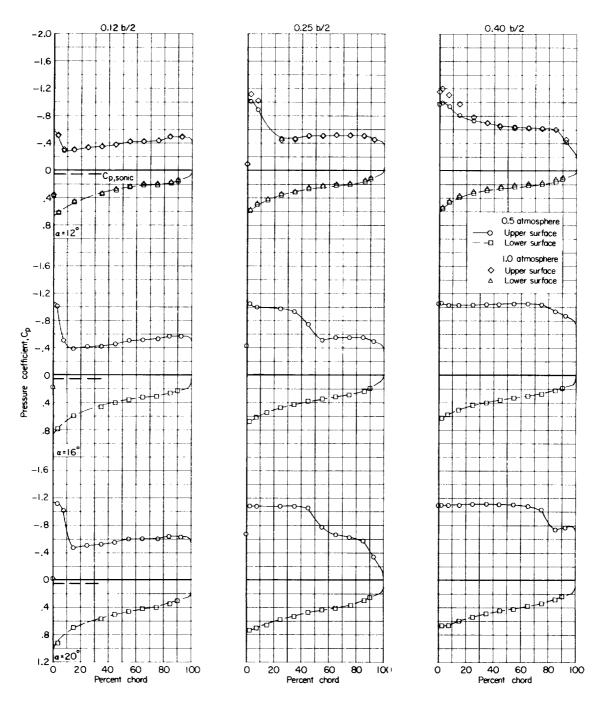
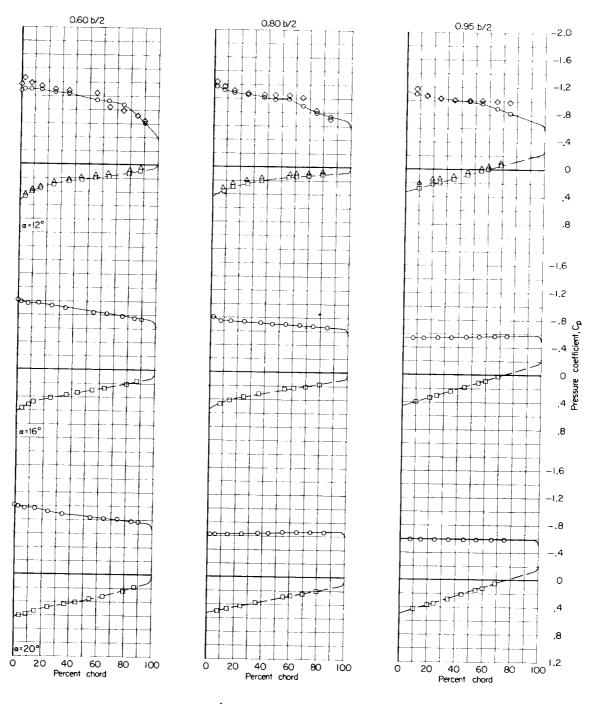


Figure 4.- Continued.



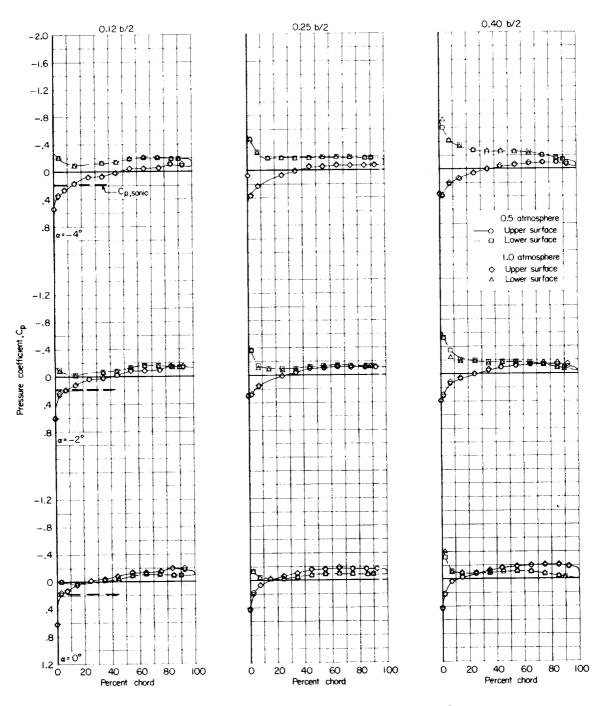
(o) M = 1.030; $\alpha = 12^{\circ}$, 16° , and 20° .

Figure 4.- Continued.



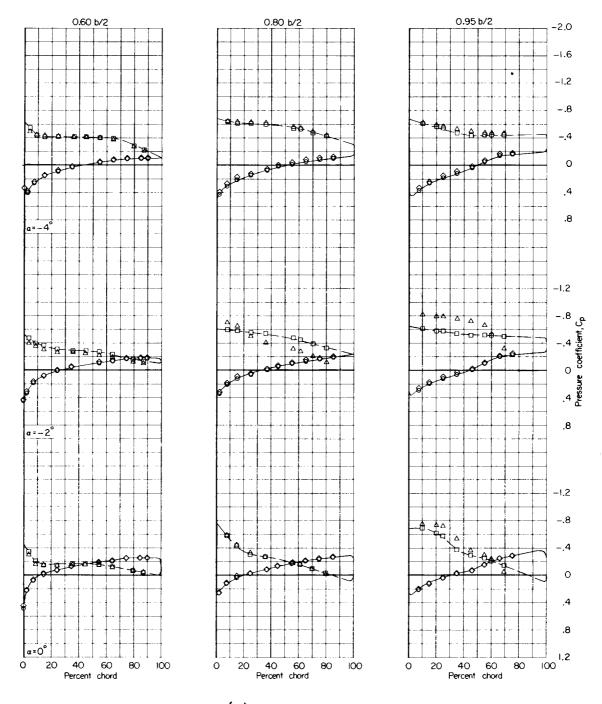
(o) Concluded.

Figure 4.- Continued.



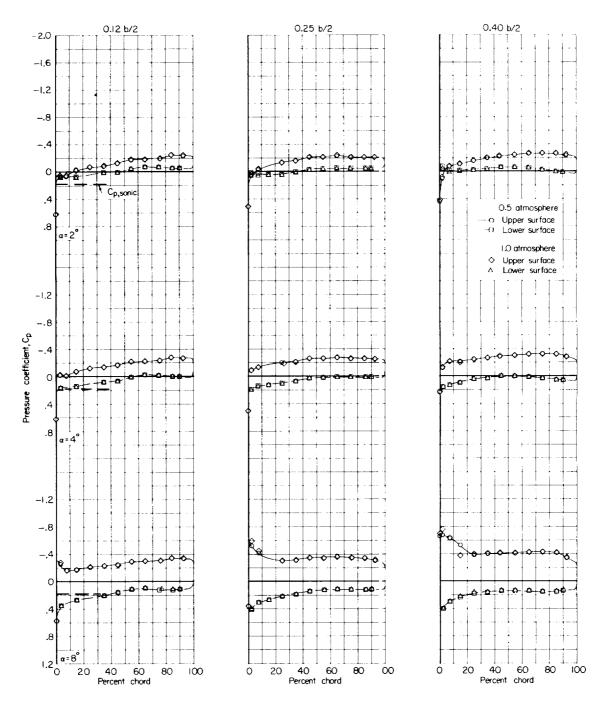
(p) M = 1.125; $\alpha = -4^{\circ}$, -2° , and 0° .

Figure 4.- Continued.



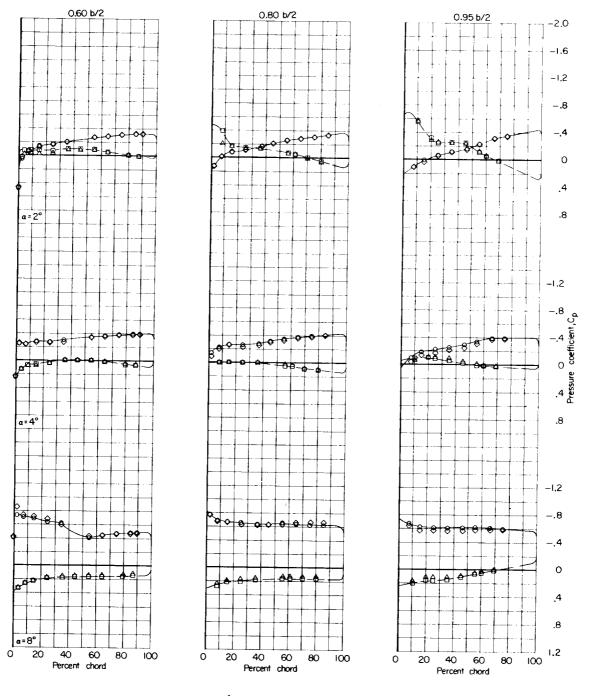
(p) Concluded.

Figure 4.- Continued.



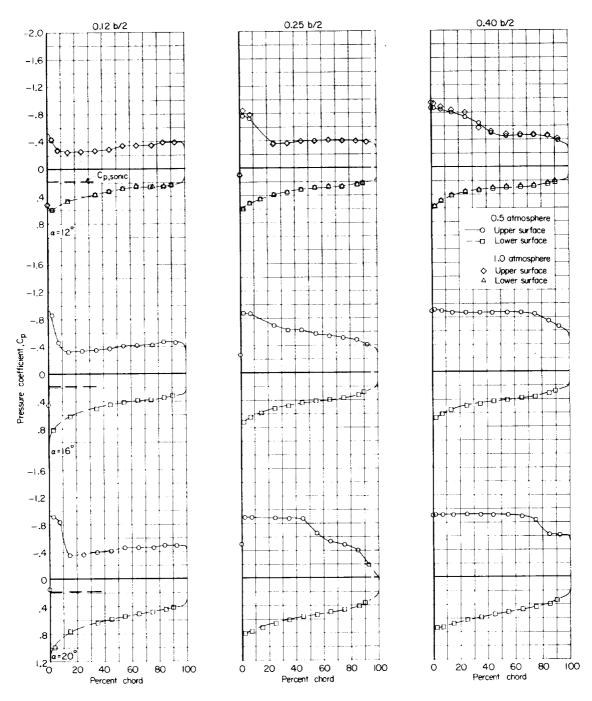
(q) M = 1.125; $\alpha = 2^{\circ}$, 4° , and 8° .

Figure 4.- Continued.



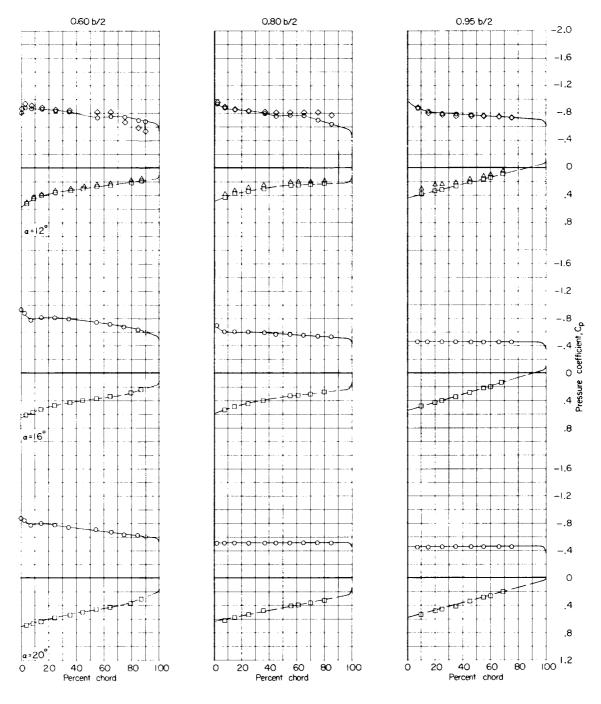
(q) Concluded.

Figure 4.- Continued.



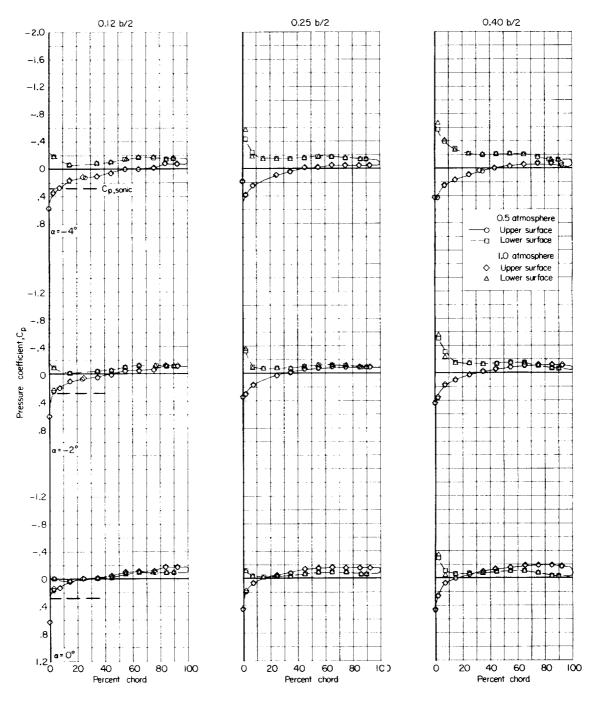
(r) M = 1.125; $\alpha = 12^{\circ}$, 16° , and 20° .

Figure 4.- Continued.



(r) Concluded.

Figure 4.- Continued.



(s) M = 1.200; $\alpha = -4^{\circ}$, -2° , and 0° .

Figure 4.- Continued.

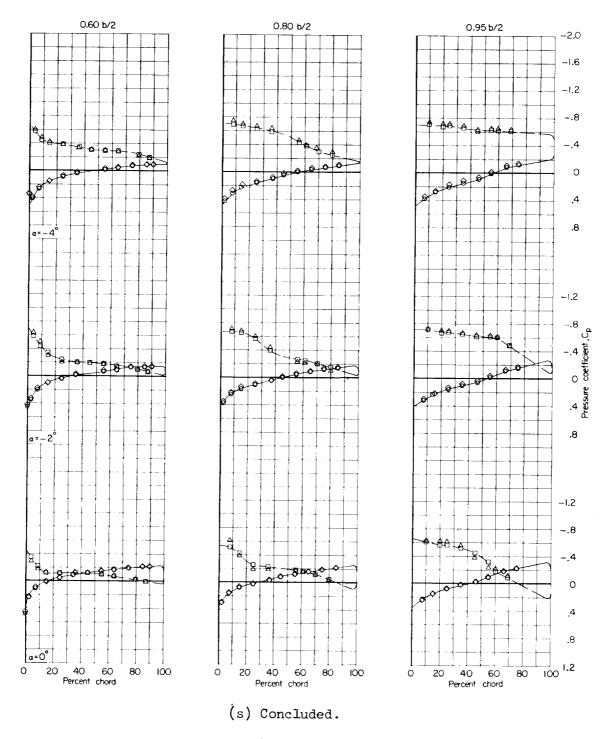
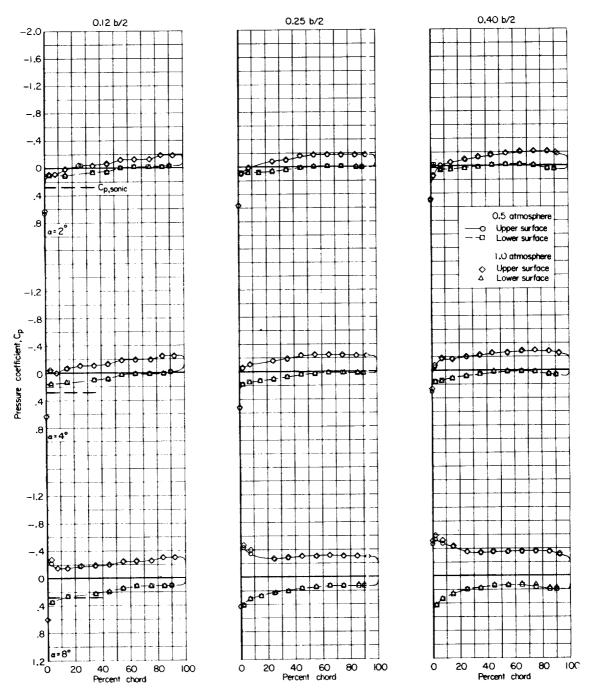
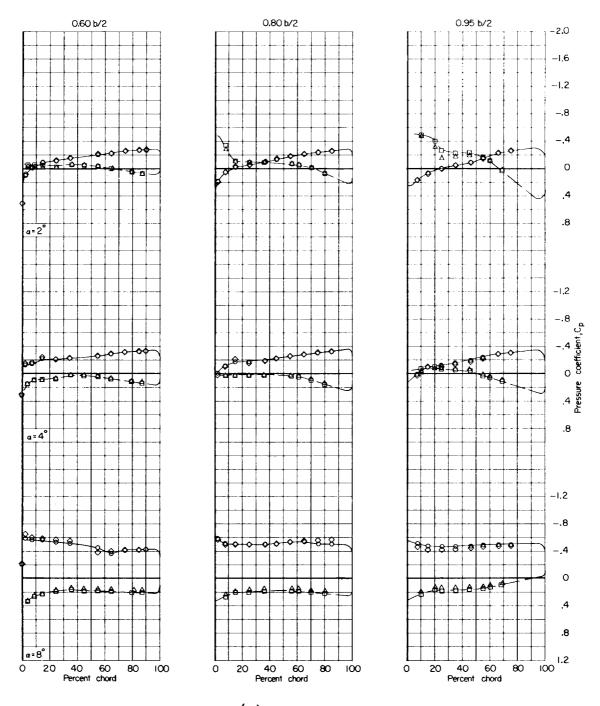


Figure 4.- Continued.



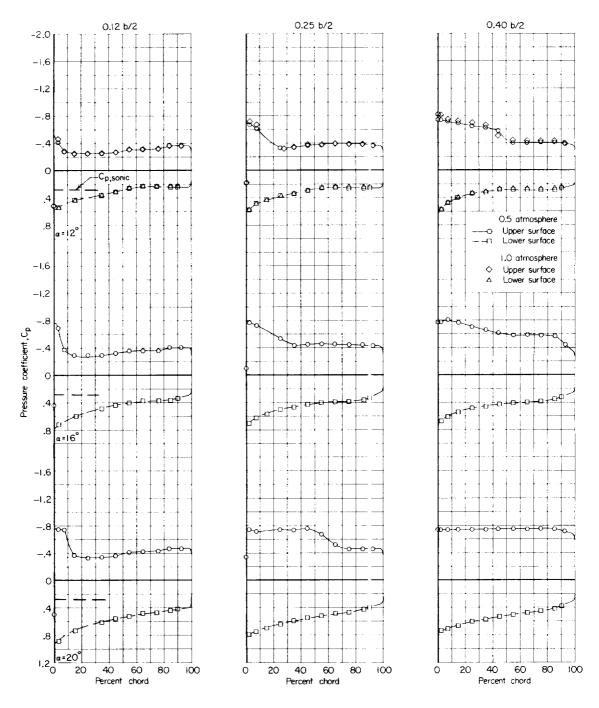
(t) M = 1.200; $\alpha = 2^{\circ}$, 4° , and 8° .

Figure 4. - Continued.



(t) Concluded.

Figure 4.- Continued.



(u) M = 1.200; $\alpha = 12^{\circ}$, 16° , and 20° .

Figure 4.- Continued.

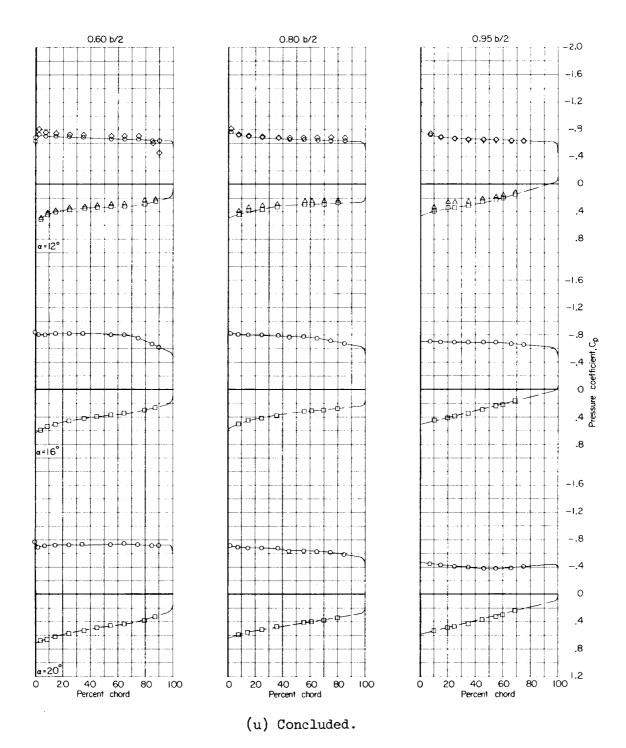


Figure 4.- Concluded.

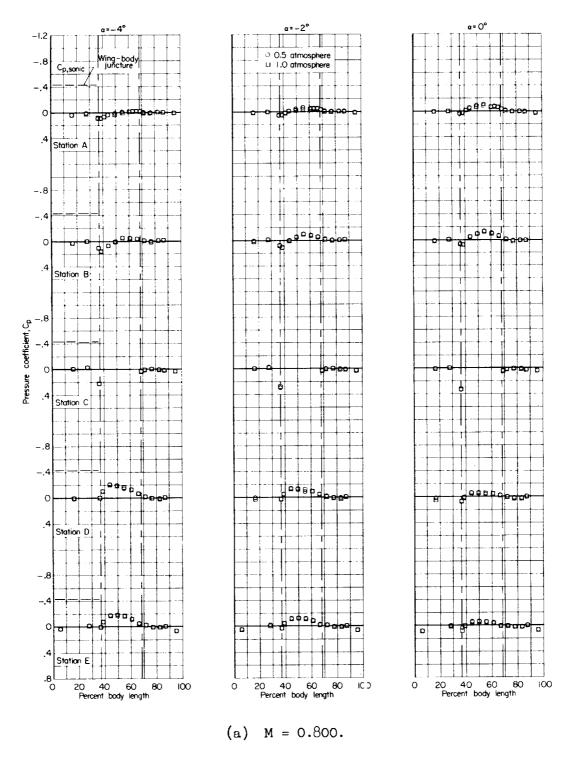


Figure 5.- Pressure measurements on the body in the presence of the wing.

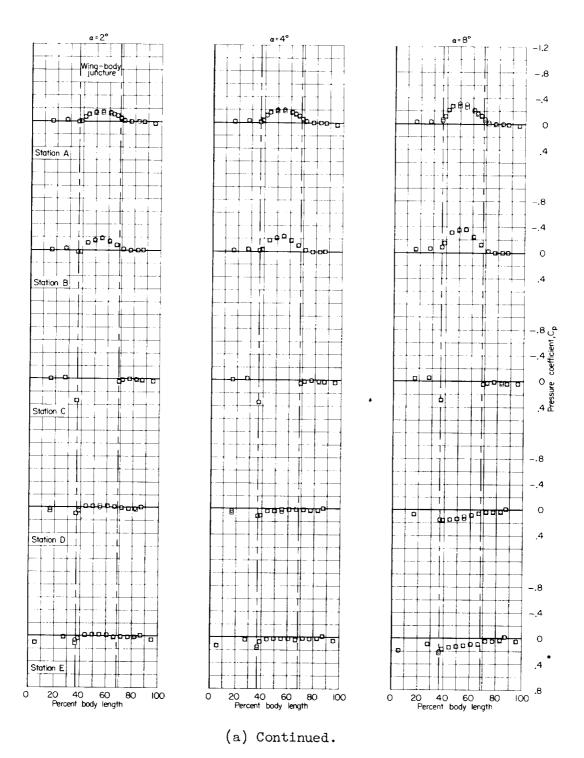
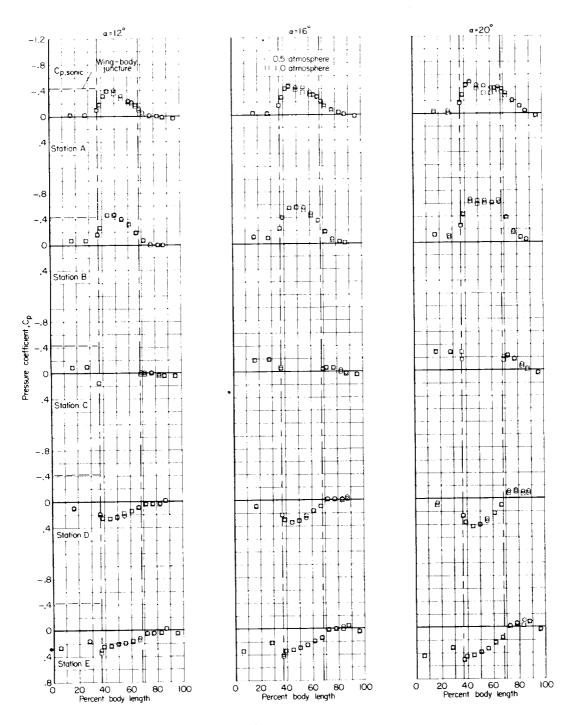
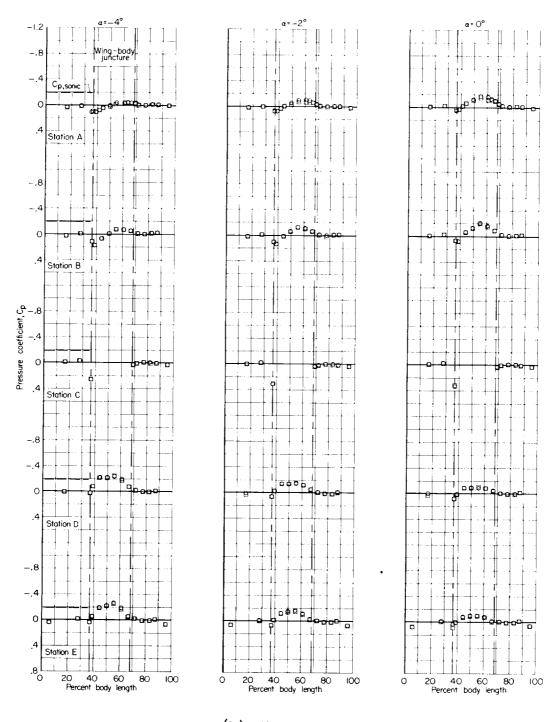


Figure 5.- Continued.



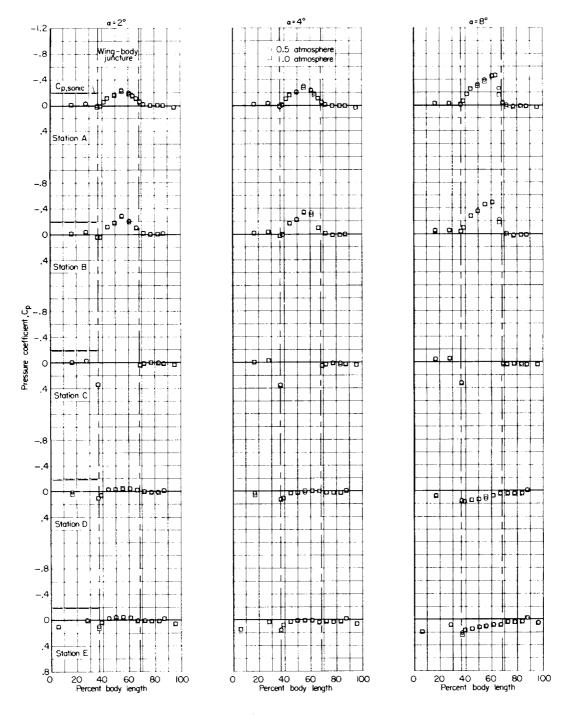
(a) Concluded.

Figure 5.- Continued.



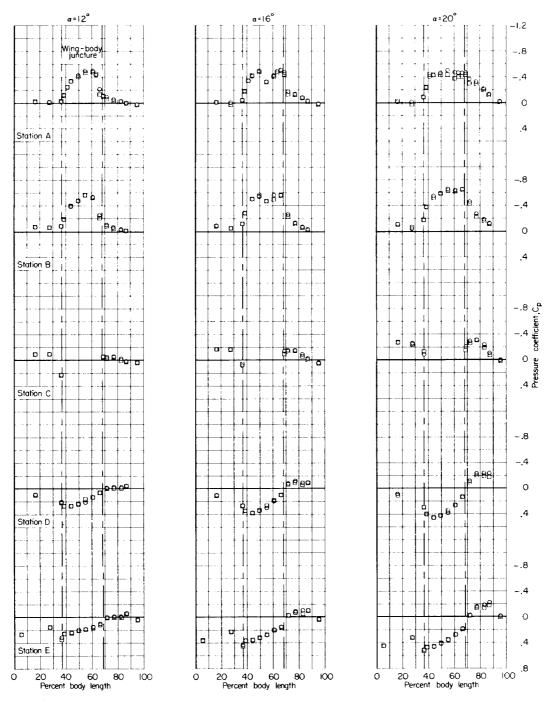
(b) M = 0.900.

Figure 5.- Continued.



(b) Continued.

Figure 5.- Continued.



(b) Concluded.

Figure 5.- Continued.

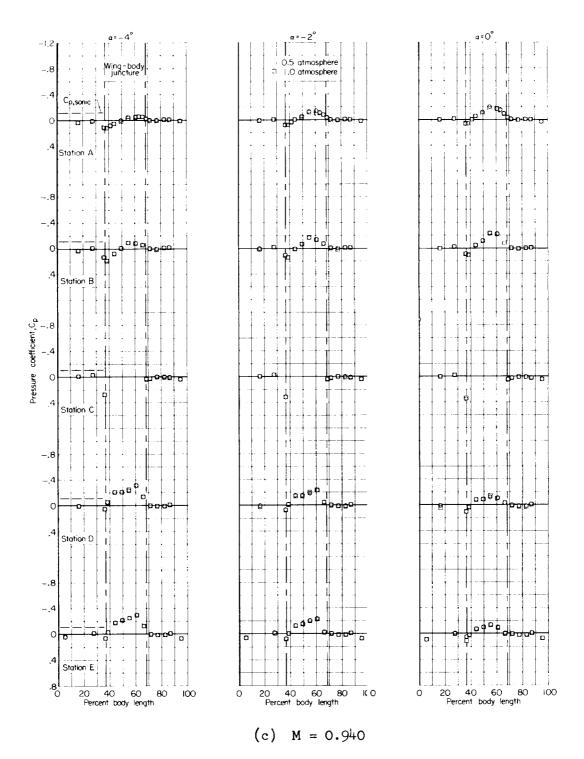


Figure 5.- Continued.

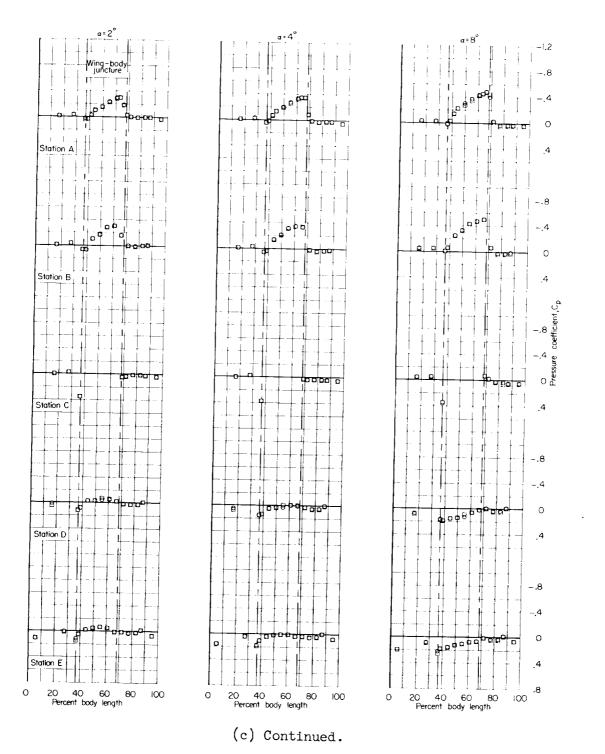
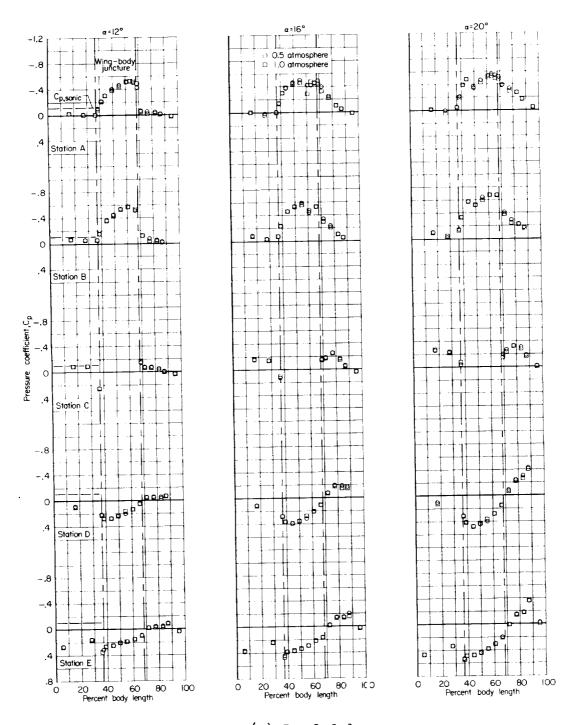


Figure 5.- Continued.



(c) Concluded.

Figure 5.- Continued.

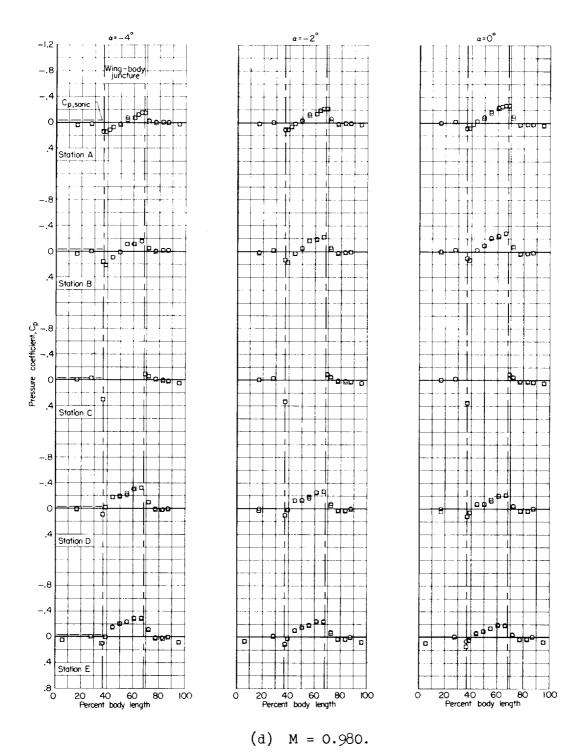


Figure 5.- Continued.

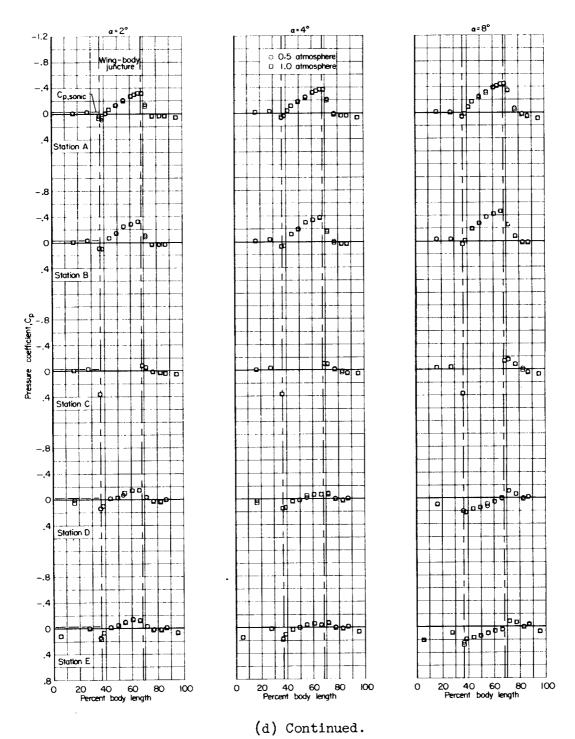


Figure 5.- Continued.

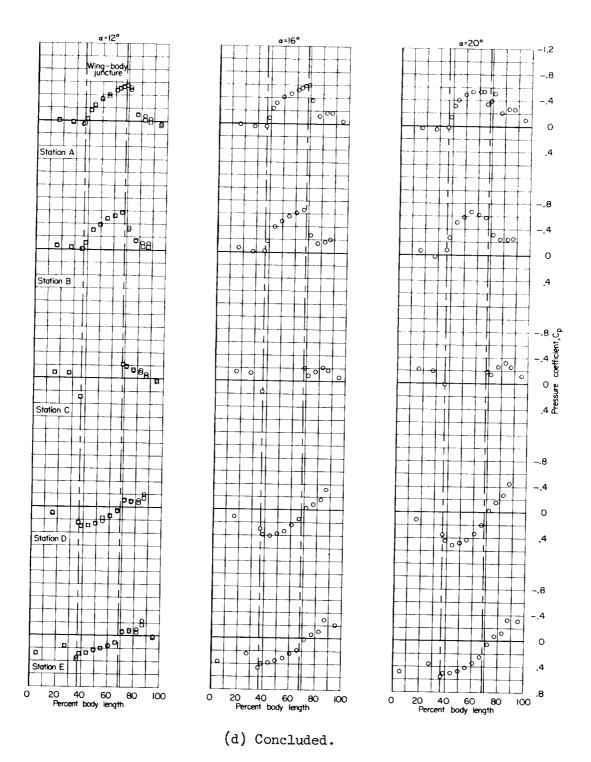


Figure 5.- Continued.

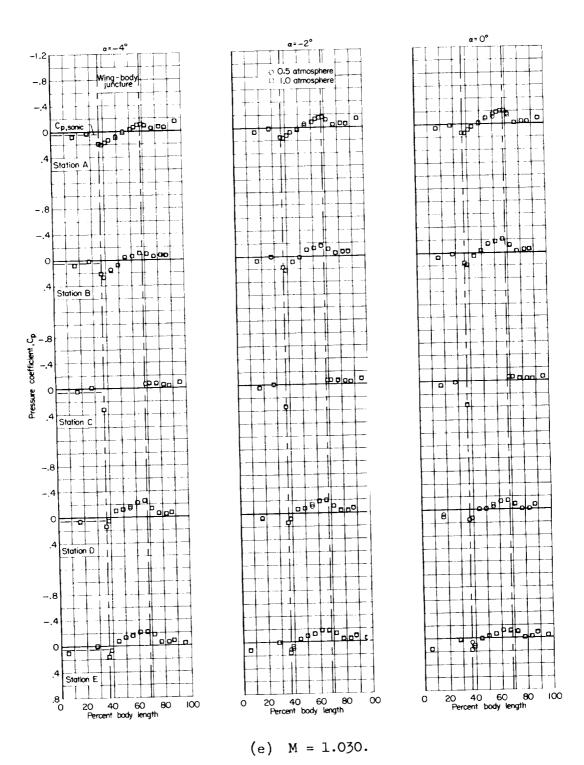
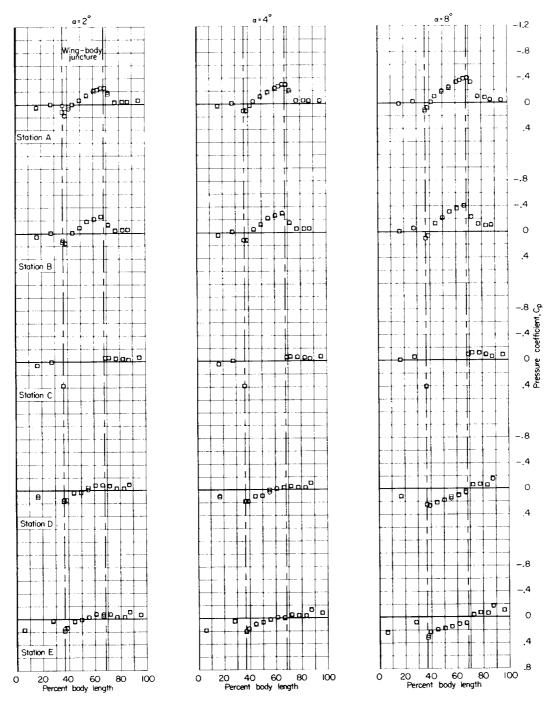
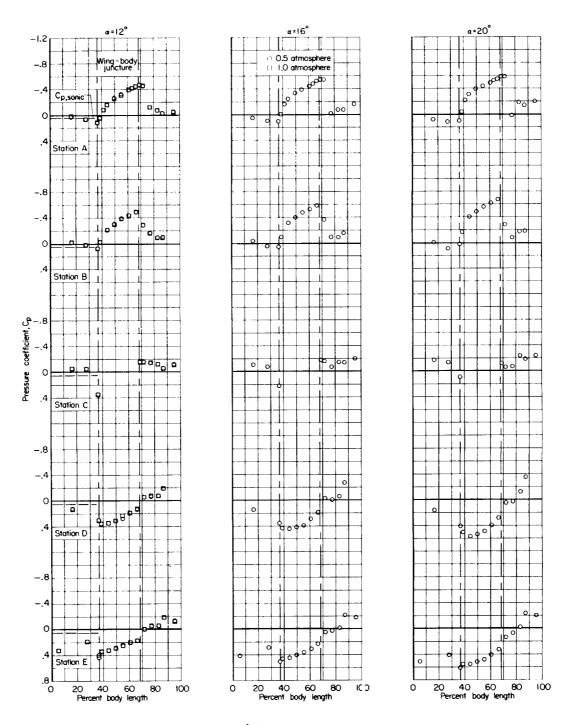


Figure 5.- Continued.



(e) Continued.

Figure 5.- Continued.



(e) Concluded.

Figure 5.- Continued.

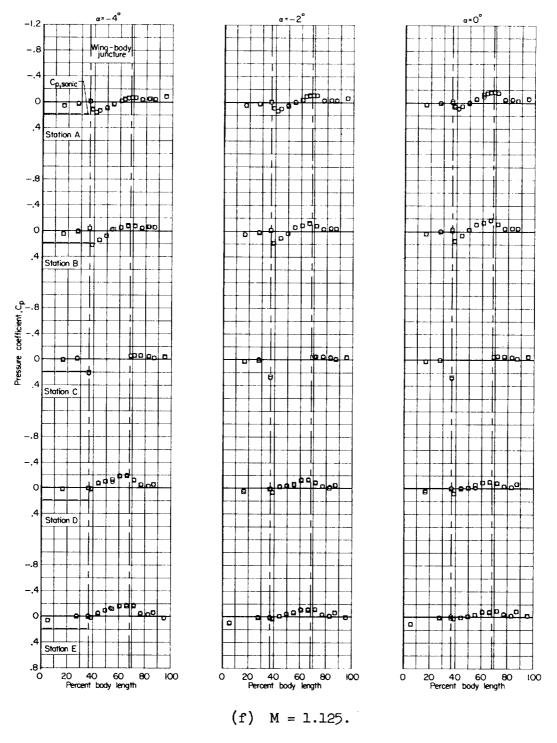
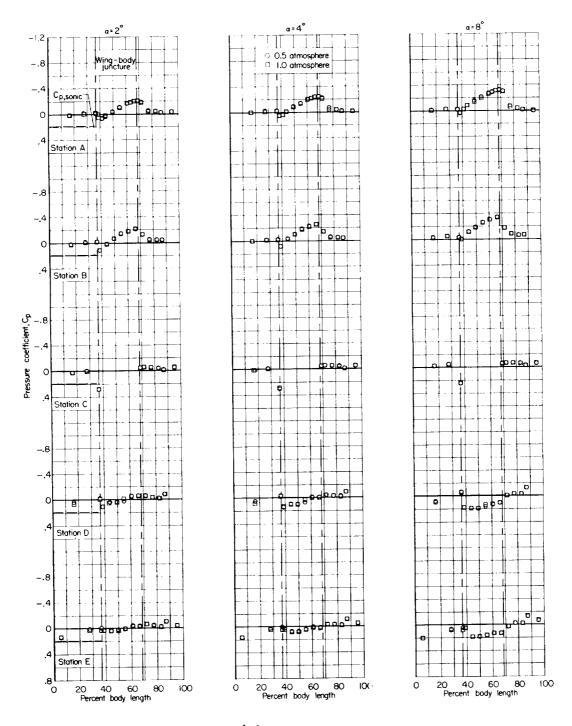
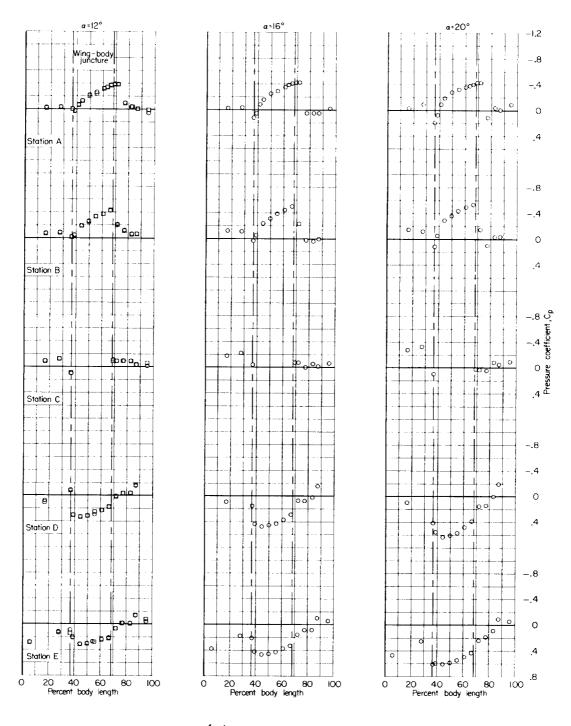


Figure 5.- Continued.



(f) Continued.

Figure 5.- Continued.



(f) Concluded.

Figure 5.- Continued.

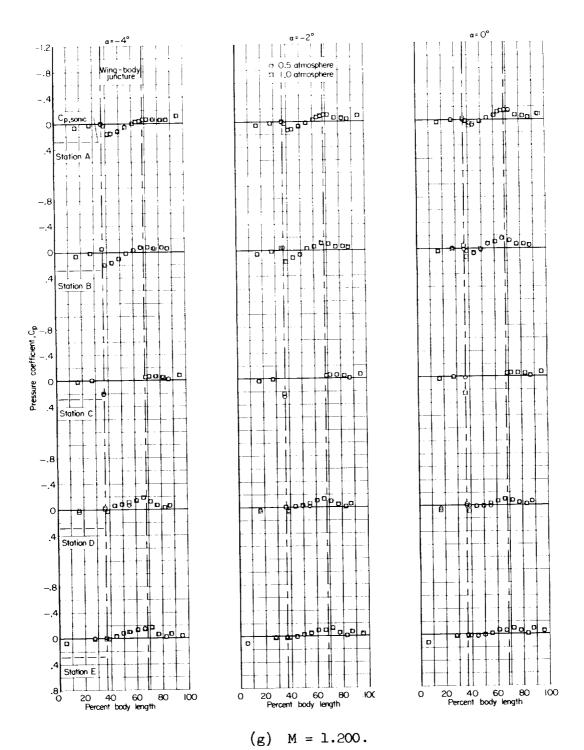
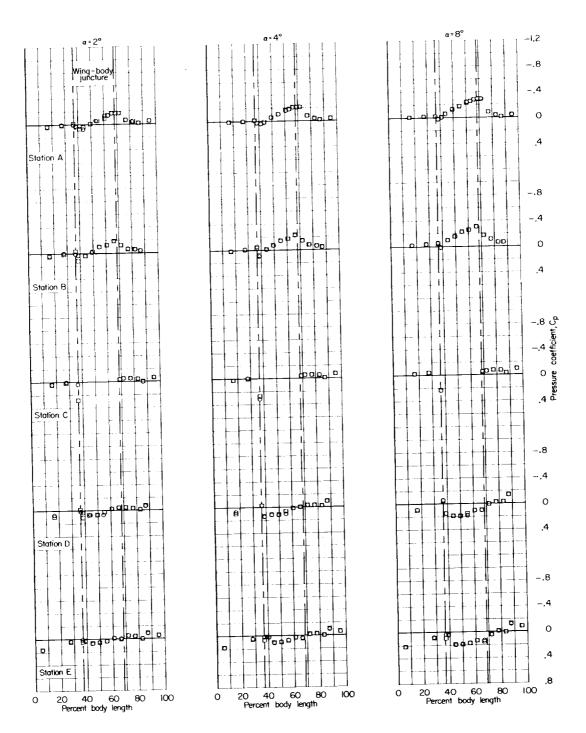
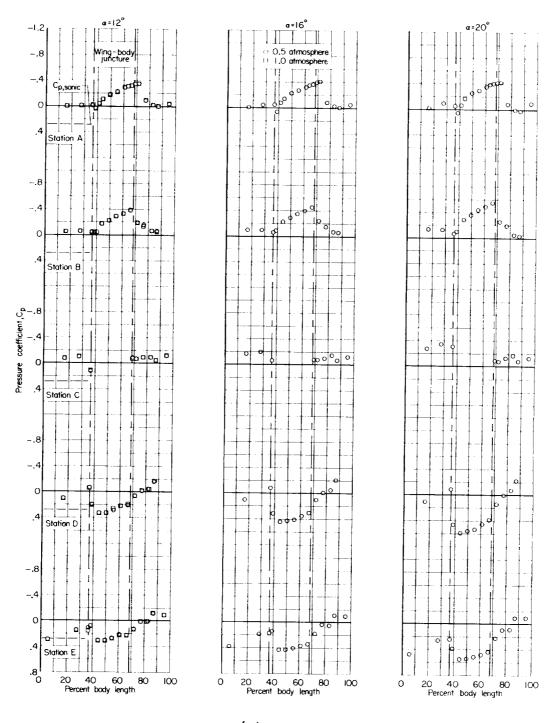


Figure 5.- Continued.



(g) Continued.

Figure 5.- Continued.



(g) Concluded.

Figure 5.- Concluded.